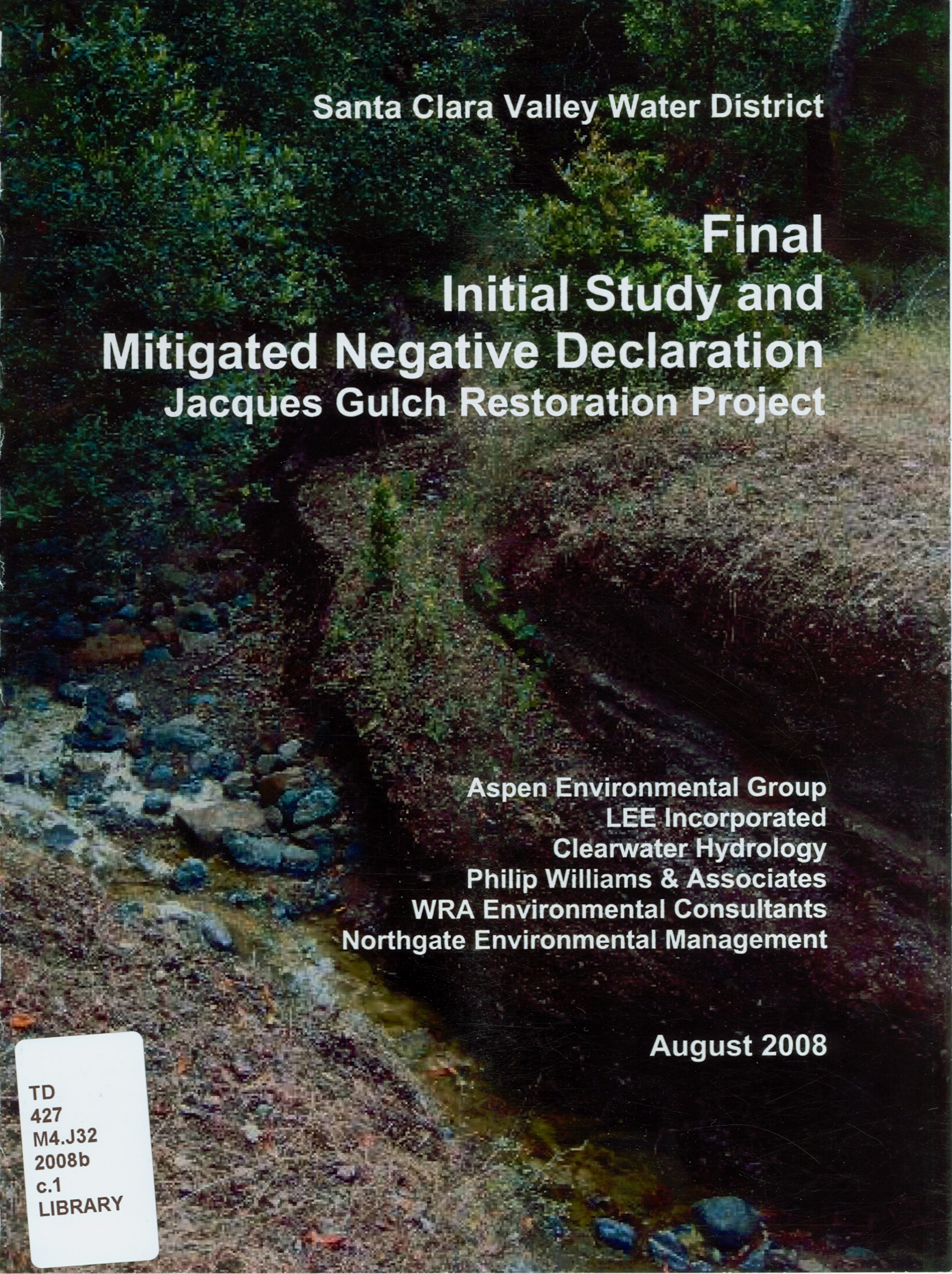

Santa Clara Valley Water District

# Final
# Initial Study and
# Mitigated Negative Declaration
## Jacques Gulch Restoration Project

Aspen Environmental Group
LEE Incorporated
Clearwater Hydrology
Philip Williams & Associates
WRA Environmental Consultants
Northgate Environmental Management

August 2008

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## Santa Clara Valley Water District

# Final Initial Study and Mitigated Negative Declaration

## Jacques Gulch Restoration Project

### Project No. 91854002

Prepared by:

Aspen Environmental Group
LEE Incorporated
Clearwater Hydrology
Philip Williams & Associates
WRA Environmental Consultants
Northgate Environmental Management

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# Contents

**LIST OF ACRONYMS** ..... **II**

**KEY TERMINOLOGY** ..... **III**

**SECTION 1 INTRODUCTION** ..... **1**

1.1 ORGANIZATION OF THIS DOCUMENT ..... 1
1.2 PURPOSE OF THE INITIAL STUDY ..... 1
1.3 DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION FOR THIS PROJECT ..... 1
1.4 PUBLIC REVIEW PROCESS ..... 2
1.5 INTERAGENCY COLLABORATION AND REGULATORY REVIEW ..... 2

**SECTION 2 PROJECT DESCRIPTION** ..... **4**

2.1 PROJECT OBJECTIVES ..... 4
2.2 PROJECT BACKGROUND ..... 4
2.3 PROJECT SCOPE OF WORK ..... 5

**SECTION 3 ENVIRONMENTAL SETTING** ..... **7**

3.1 PROJECT LOCATION ..... 7
3.2 PHYSICAL ENVIRONMENT ..... 7

**SECTION 4 ENVIRONMENTAL EVALUATION** ..... **13**

INITIAL STUDY CHECKLIST ..... 13
4.1 AESTHETICS ..... 15
4.2 AGRICULTURAL RESOURCES ..... 16
4.3 AIR QUALITY ..... 17
4.4 BIOLOGICAL RESOURCES ..... 22
4.5 CULTURAL RESOURCES ..... 31
4.6 GEOLOGY AND SOILS ..... 34
4.7 HAZARDS AND HAZARDOUS MATERIALS ..... 39
4.8 HYDROLOGY AND WATER QUALITY ..... 45
4.9 LAND USE AND PLANNING ..... 50
4.10 MINERAL RESOURCES ..... 51
4.11 NOISE ..... 52
4.12 POPULATION AND HOUSING ..... 55
4.13 PUBLIC SERVICES ..... 56
4.14 RECREATION ..... 57
4.15 TRANSPORTATION/TRAFFIC ..... 58
4.16 UTILITIES AND SERVICE SYSTEMS ..... 62
4.17 MANDATORY FINDINGS OF SIGNIFICANCE ..... 63

**SECTION 5 REPORT PREPARATION** ..... **65**

5.1 SANTA CLARA VALLEY WATER DISTRICT ..... 65
5.2 AGENCIES OR PERSONS CONTACTED ..... 65

**SECTION 6 REFERENCES** ..... **66**

## Tables

Table 1-1 Summary of Agency Approvals .......... 3
Table 4.3-1 National and California Ambient Air Quality Standards .......... 18
Table 4.3-2 Attainment Status for Bay Area Air Quality Management District .......... 18
Table 4.4-1 Trees Impacted by Jacques Gulch Restoration Project .......... 29
Table 4.11-1 Typical Noise Level for Construction Equipment .......... 54

## Figures

Figure 1-1 Regional Location
Figure 1-2 Sites A and B Project Limits
Figure 1-3 Project Vicinity and Key Features
Figure 1-4 Project Sites, Haul Route, and Consolidation Area
Figure 1-5 Proposed Project Elements
Figure 1-6 Site B Temporary Access, Options 1 and 2

## Appendices

Appendix A Mitigation Monitoring and Reporting Program Summary
Appendix B Responses to Comments
Appendix C Notice of Intent to Adopt Mitigated Negative Declaration

## List of Acronyms

| | |
|---|---|
| ASR | Archaeological Survey Report |
| BAAQMD | Bay Area Air Quality Management District |
| bgs | below ground surface |
| BMPs | Best Management Practices |
| CAAQS | California Ambient Air Quality Standards |
| CAL-IPC | California Invasive Plant Council |
| CARB | California Air Resources Board |
| CCR | California Code of Regulations |
| CDFG | California Department of Fish and Game |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CNS | Central Nervous System |
| CRHR | California Register of Historical Resources |
| CWA | Federal Clean Water Act |
| dBA | Decibels on the A-weighted scale |
| dbh | Diameter at Breast Height |
| DOC | California Department of Conservation |
| EIR | Environmental Impact Report |
| ESA | Endangered Species Act |
| HSLA | Hazardous Substance Liability Assessment |
| IS | Initial Study |
| JTU | Jackson Turbidity Unit |

| | |
|---|---|
| Ldn | Day/night noise level |
| MCL | Maximum Contaminant Level |
| MLD | Most Likely Descendant |
| MND | Mitigated Negative Declaration |
| NAAQA | National Ambient Air Quality Standards |
| NAVD | North American Vertical Datum |
| NMFS | National Marine Fisheries Service |
| NOAA | National Oceanic and Atmospheric Administration |
| NRDA | Natural Resource Damage Assessment |
| NRHP | National Register of Historic Places |
| NSR | New Source Review |
| NWP | Nationwide Permit |
| OEHHA | *Office of Environmental Health Hazard Assessment* |
| OPR | Office of Planning and Research |
| REL | Reference Exposure Level |
| RWQCB | Regional Water Quality Control Board |
| SMP | Stream Maintenance Program |
| UBC | Uniform Building Code |
| USACE | United States Army Corps of Engineers |
| USC | United States Code |
| USEPA | United States Environmental Protection Agency |
| USFWS | United States Fish and Wildlife Service |

## Key Terminology

***Beneficial Impact:*** A project impact is considered beneficial if it would result in the enhancement or improvement of an existing physical condition in the environment — no mitigation is required.

***Best Management Practices:*** A subset of mitigation measures derived from standardized District operating procedures. These practices have been identified as methods, activities, procedures, or other management practices for the avoidance or minimization of potential adverse environmental effects. They have been designed for routine incorporation into project designs and represent the "state of the art" prevention practices.

***Less than significant Impact:*** This is indicated in the Initial Study checklist where the impact does not reach the standard of significance set for that factor and the project would therefore cause no substantial change in the environment (no mitigation needed).

***Mitigation Measures:*** Mitigation includes: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments.[1]

***No Impact:*** *This is indicated in the Initial Study where, based on the environmental setting,* the stated environmental factor does not apply to the proposed project.

---

[1] Authority cited: Sections 21083 and 21087, Public Resources Code; Reference: Sections 21002, 21002.1, 21081, and 21100(c), Public Resources Code.

***Potentially Significant Impact:*** An environmental effect that may cause a substantial adverse change in the environment; however additional information is needed regarding the extent of the impact to make a determination of significance. For the purposes of review such are treated as if significant impact and mitigation measures are proposed.

***Significance Criteria:*** A set of criteria used by the lead agency to determine whether an impact would be considered significant. The District relied upon the significance criteria set forth in the CEQA Guidelines and criteria based on the regulatory standards of local, state and federal agencies.

***Significant Impact:*** An impact that would likely result in a substantial adverse change in the physical conditions of the environment. Mitigation measures and/or project alternatives are identified to avoid or reduce these effects to the environment.

**CAL-IPC Rating – High:** These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

# Section 1 Introduction

## *1.1 Organization of This Document*

This document is organized to assist the reader in understanding the potential impacts that the project may have on the environment and to fulfill the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 *et seq.*). Section 1 indicates the purpose under CEQA, sets forth the public participation process, and summarizes applicable state and federal regulatory requirements. Section 2 describes the location and features of the project. Section 3 describes the environmental setting. Section 4 evaluates the potential impacts through the application of the CEQA Initial Study Checklist questions to project implementation. Section 5 lists the contributors. Section 6 supplies the references used in its preparation.

## *1.2 Purpose of the Initial Study*

The Santa Clara Valley Water District (District), acting as the Lead Agency, prepared this draft Initial Study and Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies and trustee agencies with information about the potential environmental effects of the proposed Jacques Gulch Restoration Project (Project).

This IS/MND was prepared consistent with CEQA, the CEQA Guidelines (Title 14 Code of Regulations 15000 *et seq.*), and District procedures for implementation of CEQA (Environmental Planning Guidance WQ52001 and WW52001). CEQA requires that public agencies such as the District identify the significant adverse impacts and beneficial environmental effects of their actions. Beneficial impacts should be encouraged and expanded where possible and adverse impacts should be avoided or minimized, or mitigated in cases where avoidance and minimization are not possible.

In addition to acting as the CEQA Lead Agency for its projects, the District's mission includes objectives to conduct its activities in an environmentally sensitive manner as a steward of Santa Clara County watersheds. The District strives to preserve the natural qualities, scenic beauty and recreational uses of Santa Clara County's waterways by using methods that reflect an ongoing commitment to conserving the environment. This IS/MND is intended to allow the public to fully understand the environmental implications of the project and incorporates the CEQA process to achieve District goals, which include:

- Providing public accountability for projects it proposes or approves;
- Ensuring interagency cooperation during project planning;
- Allowing full public review and participation in project planning; and
- Integrating environmental considerations into its decisions.

## *1.3 Decision to Prepare a Mitigated Negative Declaration for this Project*

The Initial Study (Section 4) for the Jacques Gulch Restoration Project identifies potentially significant effects on biological resources and cultural resources. Mitigation measures have been proposed for the project to reduce such effects to less than significant levels; and therefore, the proposed Mitigated Negative Declaration is consistent with CEQA Guidelines §15070 which indicate that a Mitigated Negative Declaration is appropriate when:

The project's Initial Study identifies potentially significant effects, but:

a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur, and
b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

## 1.4 Public Review Process

This draft IS/MND will be circulated to local, state and federal agencies, interested organizations and individuals who may wish to review and provide comments on the project description, the proposed mitigation measures or other aspects of the report. The publication will commence the 30-day public review period per CEQA Guidelines §15105(b) beginning on **May 1, 2008** and ending on **June 2, 2008**.

The draft IS/MND is available for review at:

- Santa Clara Valley Water District
  Headquarters Building
  5700 Almaden Expressway
  San Jose, CA 95118
- Almaden Branch Library
  6445 Camden Avenue
  San Jose, CA 95120

The draft IS/MND is also:

- Posted on the District website: www.valleywater.org (click on "Access CEQA documents for public review" under DISTRICT QUICK LINKS on the home page), or
- Available via written request for a copy from the District.

Written comments or questions regarding the draft IS/MND should be submitted to the name and address indicated below. Submittal of written comments via e-mail would greatly facilitate the response process.

Ryan Heacock
Environmental Planner
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Phone: (408) 265-2607, ext. 3202
Fax: (408) 979-5657
e-mail: rheacock@valleywater.org

The District's Board of Directors is tentatively scheduled to consider adoption of the Mitigated Negative Declaration at its meeting on August 12, 2008 (the meeting date is subject to change). The proposed Mitigated Negative Declaration along with any comments will be considered by the District's Board of Directors prior to a decision on the project.

## 1.5 Interagency Collaboration and Regulatory Review

The CEQA review process is intended to provide both trustee and responsible agencies with an opportunity to provide on the project to assist with their responsibilities. Trustee agencies are state agencies that have authority by law for the protection of natural resources held in trust for the public. Responsible agencies are those that have some responsibility or authority for carrying out or approving a project. In many instances, these public agencies must make a discretionary decision to issue a local permit or provide right-of-way, funding or resources that are critical to the project's proceeding. In this instance, the County of Santa Clara, California Department of Fish and Game (CDFG), and Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) may be considered responsible agencies.

In addition, because the project occurs in a "water of the United States" and has the potential to affect both regulated wetland areas under the federal Clean Water Act (CWA) and special-status species under the federal Endangered Species Act (ESA), there are federal requirements that will have to be met. Specifically, if the project requires a dredge and fill permit (CWA §404) the United States Army Corps of Engineers (USACE) will have the responsibility to determine the conditions of issuance. This federal action under the CWA cannot be taken until USACE receives certification from the Regional Board (CWA §401) and has consulted with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) as to whether its action or the project could impact a federally protected endangered species.

This IS/MND is intended to assist federal, state and local agencies to carry out their responsibilities for permit review or approval authority over various aspects of the project. The Jacques Gulch Restoration Project may require project-specific permitting as summarized in Table 1-1.

**Table 1-1 Summary of Agency Approvals**

| Agency | Permit/Review Required |
|---|---|
| California Regional Water Quality Control Board, San Francisco Bay Region | CWA §401 (33 U.S.C. 1341) Water Quality Certification; and<br>CWA §402(p) (33 U.S.C. 1342) General Permit for Construction Activities. |
| California Department of Fish & Game | Fish and Game Code §1602 Streambed Alteration Agreement, and<br>compliance with the State Endangered Species Act (Fish and Game Code §2080). |
| County of Santa Clara | Tree Removal Permit (if required) |
| U.S. Army Corps of Engineers | CWA §404 (33 U.S.C. 1344) Permit |
| U.S. Fish & Wildlife Service | ESA §7 (50 CFR part 402) consultation, (as determined by USACE) |
| National Marine Fisheries Service | ESA §7 consultation, (as determined by USACE) |
| County of Santa Clara | License to implement project on park property (executed May 11, 2005) |

# Section 2 Project Description

## *2.1 Project Objectives*

The proposed Jacques Gulch Restoration Project is intended to fulfill District Board Ends Policies E-3.1 and E-3.2. These policies provide direction to implement mitigation commitments, identify mitigation banking opportunities that emphasize environmental benefits, and identify potential environmental enhancement opportunities for Board approval. The proposed project will be designed to fulfill the requirements of a consent decree entered into by the SCVWD, the County of Santa Clara, and other parties. Specifically, the project would satisfy that part of the consent decree requiring restoration of a part of Jacques Gulch. The consent decree's requirements are embodied in the Almaden Quicksilver Restoration Plan and Environmental Assessment (RP/EA) (January 4, 2005), which was prepared by the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

The following project objectives have been identified for the proposed Project:

Restore stream sediment and lotic/riparian habitat at two discrete sites of significant releases known as Jacques Gulch in accordance with:

- Almaden Quicksilver Restoration Plan and Environmental Assessment – Restoration of the area known as Jacques Gulch will be conducted in order to comply with the consent decree. (United States and State of California v. County of Santa Clara et al., No. 05-CV-03073-PVT)

The RP/EA satisfied the requirements of both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Draft IS/MND prepared by the SCVWD provides project-level environmental review of the project and associated mitigation measures.

## *2.2 Project Background*

A Consent Decree addressing mercury contamination has been entered into by potentially responsible parties, including the District, and state and federal agencies with trustee responsibilities for natural resources (Trustees). The Jacques Gulch Restoration Project is one of five projects identified in the decree. In addition to addressing calcine, the Project is to restore the natural conditions and services once provided by the affected areas. The Consent Decree stipulates that "[t]o restore or rehabilitate the allegedly injured natural resources, the Responsible Settling Defendant(s)...shall properly consolidate and cap onsite those calcine tailings piles identified in the area below Mine Hill known as Jacques Gulch...and further shall remove non-native plants, revegetate with native plants, and otherwise enhance the riparian habitat..." (Section VI, part 7b.)

From around 1845 to the 1970s, mining and processing cinnabar were conducted on land now within Almaden Quicksilver County Park (Park). The central mining and processing area was atop Mine Hill. Extracting mercury from cinnabar involved heating the ore to 700 to 1,200 degrees Fahrenheit in furnaces and retorts. This released mercury as a vapor. The volatized mercury was then condensed into liquid form. The residual material, known as calcine, was typically dumped near the processing area, including on the hill slopes above Jacques Gulch. During infrequent large rainstorms, water and gravity transported the calcine downhill from Mine Hill in the form of debris flows. The calcine was transported down an unnamed tributary to Jacques Gulch and the main stem of Jacques Gulch, coming to rest in these drainages. Subsequent channel incision and erosion has reworked the calcine, providing an ongoing source of sediment downstream.

The Department of Toxic Substances Control (DTSC) is the state agency overseeing the cleanup of mercury contamination in the park. A Remedial Action Plan (RAP) for the park was approved in 1994. Subsequently, major remediation area was undertaken. The most notable remediation was in and around the Hacienda Furnace entrance to the park, near the west end of the community of New Almaden. Material excavated from this and other sites on park property was hauled to a DTSC-approved consolidation site on Mine Hill, within the park. The calcine was placed in a previously mined open pit area, consolidated, and capped. In addition, extensive removal and stabilization work was undertaken on the face of Mine Hill above Jacques Gulch. This was the location from which refining waste (calcine) had migrated downhill into Jacques Gulch several decades ago. Some material was removed from the slope, which was then regraded and extensive surface drainage control installed. An Explanation of Significant Differences (ESD) issued by DTSC in 2006 describes remediation needed in Jacques Gulch, which was not one of the areas included in the 1994 RAP.

## *2.3 Project Scope of Work*

### Construction Elements

Construction of the proposed Jacques Gulch Restoration Project would involve excavation and grading activities within the project site to remove all visible calcine at two discrete areas referred to as Site A and Site B. Site A is immediately west of Alamitos Road, at Hicks Road. Site B is found farther west off Hicks Road, on a tributary to Jacques Gulch.

At Site A, the land would be graded and contoured to provide appropriate slope stability and floodplain function. The main stream channel would be restored to its current alignment. The channel would be graded to create channel and floodplain topography best suited to transport water and sediment without excessive scour or sediment deposition. The restoration would be done to allow a secondary overflow channel to form during high flows. This secondary channel would be located between the current channel alignment and Hicks Road, where the more constrained upper portion of the Site A channel transitions to its less constrained downstream reach.

A temporary sediment retention basin would be developed at the lower reach of Site A, near Alamitos Road. It would serve as part of the erosion and sediment control for the project immediately after construction, while site vegetation is being established. The basin would be sized to retain twice the projected annual sediment yield from the drainage.

An eroded road embankment below Hicks Road at its intersection with Alamitos Road would be restored and protected against future erosion. This effort would restore the road edge and result in a 3:1 slope between the road and an alluvial flood terrace. The slope would be protected with natural materials against stream scour to the 10-year flood stage.

The existing culvert crossing under Alamitos Road consists of three corrugated metal pipes and would be replaced with a culvert meeting County standards. On the upstream side, the bank and road edge of Alamitos Road would be restored and protected against erosion. On the downstream side, the bank and road edge would be restored and protected, and a stone energy dissipater would be installed below the culvert outfall.

Following construction at Site A, the disturbed area would be vegetated. The vegetation would be consistent with that of similar drainages in the area, and would include riparian plant species along the drainage and upland species at higher elevations. The vegetation would be maintained until established.

At Site B, all visible calcine would be removed and the land graded and contoured to provide appropriate slope stability and floodplain function. The stream channel would be restored in its current alignment in the topographically constrained upper reach of Site B. In the wider lower reach of Site B, the channel would be realigned and located more centrally in the floodplain to minimize proximity to eroding hill slopes. The channel would be graded to create channel and floodplain topography best suited to transport water and sediment without excessive scour or sediment deposition. As needed, low-level stone structures would be installed in the stream bed to minimize excessive erosion of the channel. Two alternatives have been identified for access to Site B. Site B Temporary Access, Option 1 would require the placement of a culvert in Jacques Gulch and the construction of an earthen ramp approximately 100 feet long by 24 feet wide. Some limited tree pruning may be required. Site B Temporary Access, Option 2 would require the removal of some trees on the north side of Hicks Road to accommodate construction of a temporary earthen ramp for equipment access to the project site and the placement of a culvert in Jacques Gulch to construct a temporary crossing. Figure 1-6 depicts these temporary access options to Site B.

Following construction at Site B, the disturbed area would be vegetated. The vegetation would be consistent with that of similar drainages in the area, and would include riparian plant species along the drainage and upland species at higher elevations. The vegetation would be maintained until established.

Calcine removed from the project sites would be hauled to an existing consolidation site on Mine Hill. At this location, this material would be added to the existing calcine previously consolidated there from elsewhere in the Park. The calcine will be compacted and covered according to standards established by the County.

Excavation and grading activities are anticipated to be completed between May and October. Once grading of the project area is complete, the area will be planted with native tree and shrub species and hydroseeded with site-appropriate native grass species.

Staging and parking areas for project construction would be designated within the project area. Upon completion of construction activities, staging area would be revegetated.

Construction access to the site would be provided from Hicks Road and/or Alamitos Road for Site A and Hicks Road for Site B. A temporary in-stream crossing across Jacques Gulch would be installed to accommodate large construction vehicles and equipment for access to Site B. The temporary in-stream crossing would be removed upon completion of construction activities. Once removed, access to the site for planting and maintenance-related activities would be on foot from Alamitos Road and Hicks Road.

### Maintenance

Maintenance of the project area would be limited to activities associated with vegetation management practices during the establishment period for planted native species. Measures would be developed to evaluate and ensure establishment of the newly planted vegetation. A monitoring approach acceptable to resource agencies would be identified to document the success of vegetation establishment. The District proposes to monitor vegetation success for three years, as specified in the RP/EA, replacing vegetation as necessary to meet the performance criteria established in conjunction with the regulatory agencies.

No maintenance of the channel is planned beyond the maintenance of vegetation during the establishment period.

# Section 3 Environmental Setting

## *3.1 Project Location*

The project is located north of Hicks Road and west of Alamitos Road in Santa Clara County, California. Figure 1-1 depicts the regional location of the project. The project is located in an area known as Jacques Gulch, at the foot of Mine Hill, within Almaden Quicksilver County Park. The project consists of two separate sites. Site A is immediately west of Alamitos Road, at Hicks Road. Site B is found farther west off Hicks Road, on a tributary to Jacques Gulch. Water flow from the project passes in a culvert beneath Alamitos Road to Almaden Reservoir.

## *3.2 Physical Environment*

Jacques Gulch drains about 1.4 square miles. The drainage area is bounded by Mine Hill to the northeast, Jacques Ridge to the northwest, and Bald Mountain to the southwest. The area receives an average of about 34 inches of rain per year. The Jacques Gulch drainage is immediately upstream of Almaden Reservoir, which it enters via culvert under Alamitos Road near Hicks Road. The project is on and is surrounded by Almaden Quicksilver County Park. The nearest residences are approximately 0.25 miles away, on Alamitos Road west of Hicks Road.

Two separate areas in Jacques Gulch were identified for restoration and enhancement. These are shown in Figure 1-2. Site A, in the lower part of the Jacques Gulch drainage, extends from Alamitos Road west (upstream) for approximately 650 feet near the north side of Hicks Road. It varies in width from approximately 85 to 140 feet, with the wider area at the eastern or downstream portion of the site. Site B is a steep narrow drainage on the unnamed tributary on the southwest side of Mine Hill. It is approximately 1,400 feet long and varies between in width from approximately 35 to 85 feet, with the broader area in the lower reach of the site, near where it joins the main stem of Jacques Gulch. The two sites are separated by a densely vegetated 550-foot reach of the Jacques Gulch main stem. This intervening reach is not part of the restoration project. At Site A, the work area covers approximately 2.1 acres. At site B, the work area covers about 1.9 acres. Calcine removed from the sites would be hauled to an existing, approved area (Consolidation Area) on Mine Hill. Calcine from other sites within the Park has been consolidated and capped previously at this Mine Hill location. Figures 1-3 and 1-4 show Sites A and B in the context of their location relative to the Consolidation Area. The proposed project elements are shown in Figure 1-5.

Historically, the project site has historically been relatively undisturbed open space. The area was likely used for agricultural grazing which was common to the region. Santa Clara County purchased the project area from the New Idria Mining and Chemical Company in two transactions in 1973 and 1975. The County designated the acquired properties the Almaden Quicksilver County Park and opened the park to public access in 1975.

Four habitat types have been identified in the project site: stream channel, riparian scrub and woodland, mixed oak–California bay woodland and forest, and non-native annual grassland. A small stand of the Loma Prieta hoita (*Hoita strobilina*; CNPS list 1B) occurs in the upper section of Site B. No other special status plant species were observed.

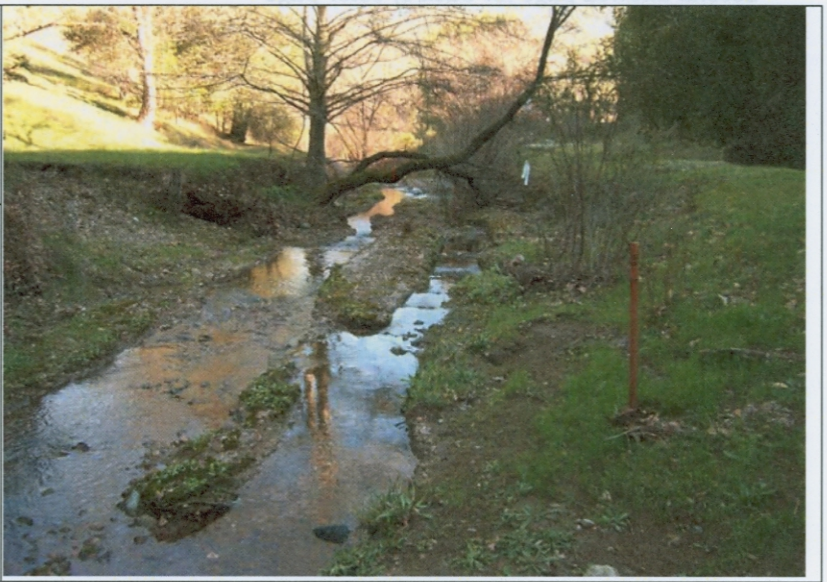
Wildlife in the project area include species common to oak woodlands. The area is within the historic range of the California red legged frog (CRLF) and the California tiger salamander (CTS). An assessment of habitat was conducted for both species. The assessment determined that the area is not suitable habitat for CTS but is suitable for CRLF. A protocol survey for CRLF was conducted, no CRLF were observed. Jacques Gulch is not believed to be suitable breeding habitat for CRLF due to high water flows during the winter, the presence of predatory fish, and the negative survey findings. However, Jacques Gulch does provide adequate dispersal habitat for CRLF. SCVWD is working USFWS to further discuss the protocol surveys. The San Francisco dusky footed woodrat, a USFWS Species of Concern and CDFG Species of Special Concern, has been detected on the site. Several special status avian species have the potential to occur at the project site. Several species of bats may also occur on site.

Representative photographs of the project area are shown in the following photographs (Photograph Nos. 1 through 4). Detailed descriptions of physical environments for key areas of environmental concern are presented in Section 4.

Photograph No. 1

**Direction:** West

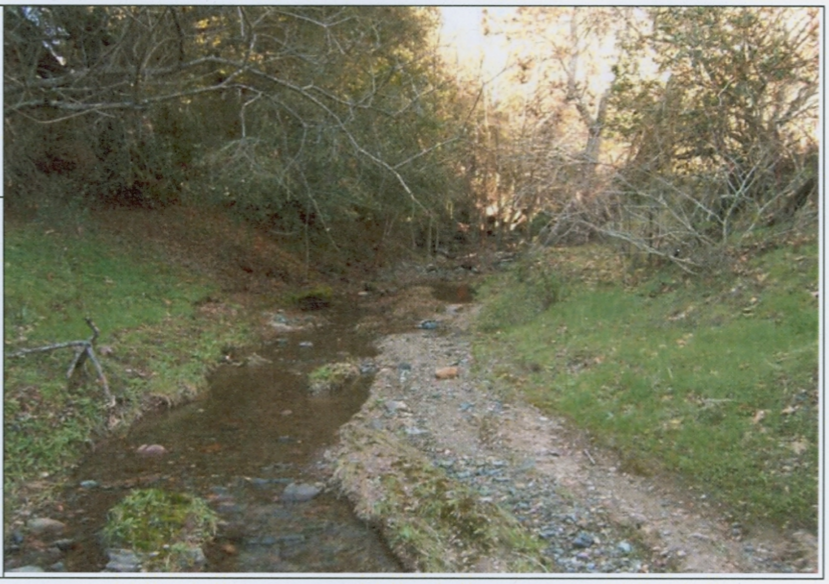
**Description:**
Looking upstream from near the intersection of Alamitos Road and Hicks Road at calcine deposits within the stream channel and on the banks in lower portion of Site A.



Photograph No. 2

**Direction:** West

**Description:**
Looking upstream at calcine deposits within the stream channel and on the banks in upper portion of Site A.



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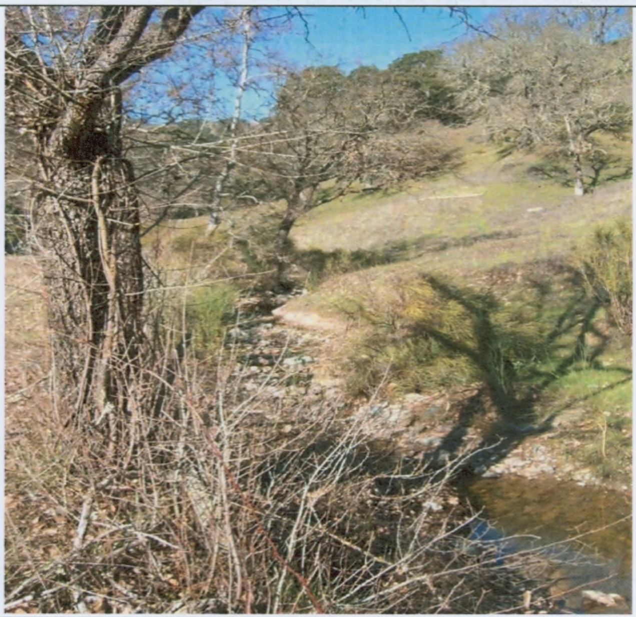
Photograph No. 3

**Direction:** North

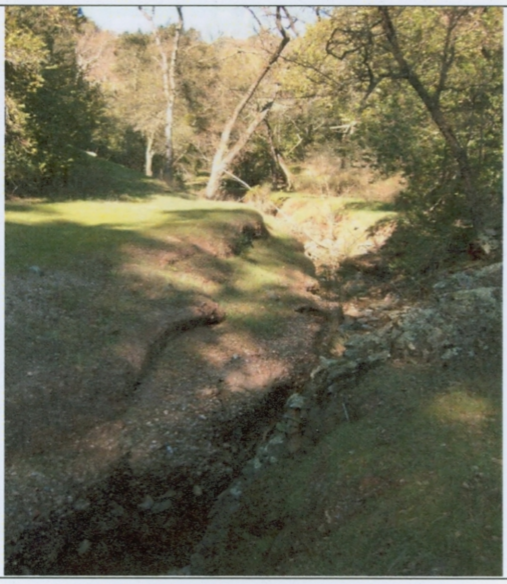
**Description:**
Looking upstream at calcine deposits within the stream channel and on the banks in lower portion of Site B.



Photograph No. 4

**Direction:** North

**Description:**
Looking upstream at calcine deposits within the stream channel and on the banks in upper portion of Site B.



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# Section 4 Environmental Evaluation

## *Initial Study Checklist*

In accordance with CEQA, the following Initial Study Checklist is an analysis of the project's potential environmental effects to determine whether an Environmental Impact Report is needed. Answers to the checklist questions provide factual evidence and the District's rationale for determinations of the potential significance of impacts resulting from the proposed project.

The Initial Study checklist shows that the proposed project may have potentially significant effects on biological resources and cultural resources. Mitigation measures have been proposed for the project to reduce such effects to less than significant levels, and therefore, the proposed Mitigated Negative Declaration is consistent with CEQA Guidelines §15070. Descriptions of the BMPs and/or mitigation measures to be incorporated in the proposed project are included.

### Background

| | |
|---|---|
| 1. Project Title: | Jacques Gulch Restoration |
| 2. Lead Agency Name and Address: | Santa Clara Valley Water District<br>5750 Almaden Expressway<br>San Jose, CA 95118 |
| 3. Contact Person and Phone Number: | Ryan Heacock<br>(408) 265-2607, ext. 3202 |
| 4. Project Location: | APNs 742-01-002, 583-23-012, 583-55-001, 583-55-006, 583-55-004, 583-23-019, 583-24-009, 583-24-007, 583-24-004, 583-26-001 |
| 5. Project Sponsor's Name and Address: | Santa Clara Valley Water District<br>5750 Almaden Expressway<br>San Jose, CA 95118 |
| 6. General Plan Designation: | Regional Park, Existing |
| 7. Zoning: | Hillside |
| 8. Description of the Project: | The Project proposes the removal of mercury-laden sediments and restoration of Jacques Gulch and a section of an unnamed tributary to Jacques Gulch. |
| 9. Surrounding Land Uses and Setting: | The proposed project site consists of, and is surrounded by, undeveloped County park property. |
| 10. Other public agencies whose approval is required: | U.S. Army Corps of Engineers; California Regional Water Quality Control Board, San Francisco Bay Region; California Department of Fish and Game; National Marine Fisheries Service; County of Santa Clara |

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | | | | |
|---|---|---|---|---|---|
| | Aesthetics | | Agricultural Resources | ✓ | Air Quality |
| ✓ | Biological Resources | ✓ | Cultural Resources | ✓ | Geology / Soils |
| ✓ | Hazards & Hazardous Materials | | Hydrology / Water Quality | | Land Use / Planning |
| | Mineral Resources | | Noise | | Population / Housing |
| | Public Services | | Recreation | ✓ | Transportation / Traffic |
| | Utilities / Service Systems | | Mandatory Findings of Significance | | |

**DETERMINATION:**

On the basis of this initial evaluation:

| | |
|---|---|
| I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. | |
| I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. | ✓ |
| I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required. | |
| I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. | |
| I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. | |

Signature

4/24/08
Date

Ryan Heacock
Environmental Planner

## 4.1 Aesthetics

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect on a scenic vista? | | | ✓ | |
| b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | ✓ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | | ✓ | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | ✓ |

**Discussion**

**a):** The project area is not visible from afar due to intervening vegetation and terrain. While construction activities would disrupt the natural character of views from near the project sites, these impacts would be short-term and temporary. As the proposed project is a part of the Almaden Quicksilver Restoration Plan, the project would restore the character of the project sites to their natural conditions and would enhance views of the area. Any impacts that would occur during construction would be adverse, but would be less than significant.

**b) and d):** The project would not substantially damage a scenic resource within a state scenic highway or create a new source of substantial light or glare which would adversely affect day- or nighttime views in the area.

**c):** Although project construction would temporarily degrade the existing visual character of the proposed project sites, the project is designed to restore and enhance the natural character of the area. Construction activities would disrupt the existing natural visual character of the project sites and would temporarily degrade the aesthetic quality of these areas. These disruptions and degradation, however, would be temporary and short-term, lasting only for the duration of project construction. Consequently, any impacts would be adverse, but would be less than significant.

## *4.2 Agricultural Resources*

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | ✓ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | ✓ |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | | | | ✓ |

**Discussion**

**a) – c):** The proposed project would not be expected to result in significant impacts to agricultural resources. The proposed project sites are located in Santa Clara County approximately 1.3 miles from the City of San Jose on and adjacent to land designated as grazing land in the 2004 mapping for the Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP). The project sites are approximately three miles from the nearest parcels of Prime Farmland and Farmland of Statewide importance and approximately five miles from the nearest parcel of Unique Farmland. The proposed project would not be located on any lands under Williamson Act contract (DOC, 2004). No lands in this area are zoned or designated as agriculture either by the County of Santa Clara or the City of San Jose (City of San Jose, 2006a; City of San Jose, 2006b; County of Santa Clara, 2002)." If permitted by the County, grazing would be feasible on the affected lands.

## *4.3 Air Quality*

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | ✓ |
| b) Violate any air quality standard or contribute to an existing or projected air quality violation? | | ✓ | | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | ✓ | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | | ✓ |
| e) Create objectionable odors affecting a substantial number of people? | | | | ✓ |

### Criteria Pollutants

Air quality is determined by measuring ambient concentrations of criteria pollutants, which are air pollutants for which acceptable levels of exposure can be determined and for which standards have been set. The degree of air quality degradation is then compared to the current National and California Ambient Air Quality Standards (NAAQS and CAAQS). Historic differences of opinion by medical panels established by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) cause considerable diversity between State and Federal standards in California. In general, the CAAQS are more stringent than the corresponding NAAQS. The standards currently in effect in California are shown in Table 4.3-1.

### Toxic Air Contaminants

Toxic air contaminants are regulated because they are suspected or known to cause cancer, birth defects, neurological damage, or death. There are no established ambient air quality standards for toxic air contaminants. Instead they are managed on a case-by-case basis depending on the quantity and type of emissions and proximity of potential receptors. Asbestos is classified as a known human carcinogen and is a toxic air contaminant. Naturally occurring asbestos minerals may be found in serpentinite rock that is located in the region of the Proposed Project. To address the potential health hazards of this substance should it become airborne, the state Governor's Office of Planning and Research (OPR, 2000) and the CARB (17 Cal. Code Regs. 93105) have each established recommendations and requirements to minimize emissions of naturally occurring asbestos from construction and grading.

### Attainment Status and Air Quality Plans

The U.S. EPA, CARB, and the local air district classify an area as attainment, unclassified, or nonattainment, depending on whether or not the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. The project site is located within Santa Clara County under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). This portion of the Bay Area is downwind of many urban sources of pollution in San Jose and further upwind in San Francisco, San Mateo, and Alameda Counties. Table 4.3-2 summarizes the attainment status of the criteria pollutants in the Bay Area with the federal and state standards.

## Rules and Regulations

### Bay Area Air Quality Management District

The responsibility for developing regional air quality plans within the project area lies with the BAAQMD. BAAQMD exercises permit authority through its Rules and Regulations by requiring that new stationary sources secure a permit to construct and a permit to operate through the New Source Review (NSR) program (Regulation 2, Rule 2). This ensures that such sources would not interfere with progress in attainment of State and national ambient air quality standards. Mobile and portable sources and temporary activities that cause emissions of air contaminants are managed through a range of State and federal programs mentioned below.

- *U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program.* The California Clean Air Act mandates CARB achieve the maximum degree of emission reductions from all off-road mobile sources in order to attain the state ambient air quality standards. Off-road mobile sources include construction equipment. Tier 1 standards for large compression-ignition engines used in off-road mobile sources went into effect in California in 1996.

**Table 4.3-1. National and California Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards* | National Standards* |
|---|---|---|---|
| Ozone | 1 hour | 0.09 ppm | — |
| | 8 hours | 0.07 ppm | 0.08 ppm |
| Respirable Particulate Matter (PM10) | 24 hours | 50 µg/m$^3$ | 150 µg/m$^3$ |
| | Annual Mean | 20 µg/m$^3$ | 50 µg/m$^3$ |
| Fine Particulate Matter (PM2.5) | 24 hours | — | 65 µg/m$^3$ |
| | Annual Mean | 12 µg/m$^3$ | 15 µg/m$^3$ |
| Carbon Monoxide (CO) | 1 hour | 20 ppm | 35 ppm |
| | *8 hours* | *9.0 ppm* | *9.0 ppm* |
| Nitrogen Dioxide ($NO_2$) | 1 hour | 0.25 ppm | — |
| | Annual Mean | — | 0.053 ppm |
| Sulfur Dioxide ($SO_2$) | 1 hour | 0.25 ppm | — |
| | 24 hours | 0.04 ppm | 0.14 ppm |
| | Annual Mean | — | 0.03 ppm |

* ppm=parts per million; µg/m3= micrograms per cubic meter; “—“ =no standard.

Source: CARB Ambient Air Quality Standards Chart, 2006.

**Table 4.3-2. Attainment Status for Bay Area Air Quality Management District**

| Pollutant | Federal Designation | State Designation |
|---|---|---|
| Ozone (1-hour) | Not Applicable | Serious Nonattainment |
| Ozone (8-hour) | Marginal Nonattainment | Not Available |
| $PM_{10}$ | Serious Nonattainment | Nonattainment |
| $PM_{2.5}$ | Attainment | Nonattainment |
| CO | Attainment | Attainment |
| $NO_2$ | Unclassified/ Attainment | Unclassified/ Attainment |
| $SO_2$ | Attainment | Attainment |

- _CARB Portable Equipment Registration Program._ This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide portable program to operate their equipment throughout California without having to obtain individual permits from local air districts.
- _State-wide Asbestos Airborne Toxic Control Measure._ CARB requires special dust control measures for any construction and grading operations in areas known to contain serpentinite soils with naturally occurring asbestos.
- _BAAQMD Regulation 2 Rule 1 – General Requirements._ This regulation prohibits any source from causing a public nuisance and defines what equipment is subject to permitting/new source review requirements and exempts portable stationary equipment (e.g., generators or soil screeners) from permitting if they comply with all applicable requirements of the Statewide Portable Equipment Registration Program.

Other general rules such as Regulation 6 – Particulate Matter and Visible Emissions (for dust control) would also apply to all project activities.

The CEQA Guidelines also recommend that the criteria established by the local air district should be relied upon to make determinations of significance. The BAAQMD recommends controlling dust (PM10) during construction to minimize nuisance conditions and avoid violations of the ambient air quality standards. The BAAQMD recommends that a standard set of feasible dust control measures be implemented for all construction activities. Emissions of other contaminants (NOx, VOC, CO, SO2, and diesel-related PM10) that would occur in the exhaust from heavy equipment are included in the regionwide inventory that is the basis for regional attainment and are not expected to impede attainment of maintenance of the ambient air quality standards. The BAAQMD does not recommend quantification of construction-related emissions but rather recommends implementation of specific measures that can reduce the potential impacts to a level that would be considered less than significant (BAAQMD, 1999). Similarly, emissions of naturally occurring asbestos in serpentinite soils can be reduced to less than significant levels with implementation of State-recommended measures for dust control during work in these areas (OPR, 2000).

### Discussion

**a):** The project would be inconsistent with air quality plans if it would result in population and/or employment growth that exceeds the growth estimates included in the applicable air quality plans, or could be inconsistent if the project does not conform to the strategies in the applicable air quality plans. The project itself would not lead to population or job growth like a housing or commercial project, and would not cause an increase in long-term employment since employment would be temporary. Therefore, the proposed project would not impact or obstruct the implementation of the applicable air quality plans.

**b):** The proposed project would involve earthmoving and construction-type activities including the removal of calcine, land grading, contouring, restoration of slopes, and repairing stream banks and culverts. Construction activities would require work crews and equipment activity at Site A, Site B, and the Mine Hill consolidation area and along the Hicks/Wood route to Mine Hill. The activity would be temporary, lasting one construction season. This activity would not occur near land uses that would be considered sensitive to air quality impacts (residences, schools, children's day care centers, hospitals, and convalescent homes where population groups may have increased susceptibility to respiratory distress).

Project activities would generate emissions at the work sites and along the connecting roads. The impacts would principally consist of exhaust emissions from heavy-duty diesel and gasoline-powered construction equipment (e.g., ozone precursors, NOx and VOC, other criteria pollutants, such as CO and PM10, and toxic exhaust emissions) and fugitive particulate matter (dust) from earthmoving activities and travel on unpaved surfaces. Beyond the project area, exhaust emissions would also be caused by workers commuting to and from the work sites and from trucks hauling equipment and supplies to the work sites.

The proposed project and each alternative would involve implementation of the following BMPs established by the SCVWD in its BMP Handbook. Implementation of the following BMPs would satisfy the BAAQMD recommendations for mitigation and reduce this impact to a less than significant level.

- AQ-1, Bay Area Air Quality Management District Basic Dust Control Measures (all construction sites)
- AQ-2, Bay Area Air Quality Management District Enhanced Dust Control Measures (sites greater than 4 acres in size)
- AQ-3, Bay Area Air Quality Management District Optional Dust Control Measures
- AQ-4, Avoid Stockpiling Potentially Odorous Sediments

(See Appendix A for details)

Naturally occurring asbestos minerals may be found in serpentinite rock that is located in the region. Project activity that involves travel on serpentine soils or disturbing serpentinite surfaces can therefore lead to airborne emissions of dusts that contain the mineral asbestos. Geologic mapping by Bailey and Everhart (USGS, 1964) does not show serpentine bodies included in the study area along Jacques Gulch. Small bodies of serpentine and silica-carbonate rock (the host rock for the mercury ore) are present higher up at the top of the drainage, so it may be possible that some serpentine rock is present in the alluvial gravels within the drainage. It should be noted, however, that the silica-carbonate rock is derived from the hydrothermal alteration of serpentine. Photomicrographs contained in the Bailey and Everhart report show that during the alteration process, chrysotile (asbestos) in the serpentine is replaced by magnesite. As with any geologic process, the degree of alteration can range from partial to complete. As such, it is possible that the calcine deposits (processed silica-carbonate rock) could potentially contain enough unaltered serpentine or potential chrysotile-bearing rock to trigger the Air Resources Board Asbestos Airborne Toxic Control Measure, including an asbestos dust mitigation plan.

The State Governor's Office of Planning and Research (OPR, 2000) and the CARB (17 Cal. Code Regs. 93105) have each established recommendations and requirements that would minimize the likelihood of this material becoming airborne, and thus reduce the potential health hazards. The strategies to manage asbestos made airborne by working on serpentine soils would be similar to, but more aggressive than, the strategies implemented for routine dust control. Mitigation Measure Air-1 would implement the CARB requirements and reduce this impact to a less than significant level.

**Air-1** **Prepare and implement asbestos dust mitigation plan.** An Asbestos Dust Mitigation Plan shall be prepared by SCVWD, or its contractor, and submitted to and approved by the Bay Area Air Quality Management District before the start of any construction or grading activity. The plan shall be prepared and implemented according to the requirements of 17 Cal. Code Regs. 93105 (CARB Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations).

**c):** Project activities, including heavy truck traffic and worker vehicle traffic, would cause emissions during the limited duration of work. Upon completion of construction of the project, project-related emissions would cease. Because emissions would be temporary, they would not result in a cumulatively considerable net increase that could impede attainment or maintenance of the ambient air quality standards. As such, this impact would be less than significant.

**d):** The proposed project site is located in an open space area on Park and District land and project activities would not occur near land uses that would be considered sensitive to air quality impacts (residences, schools, children's day care centers, hospitals, and convalescent homes where population groups may have increased susceptibility to respiratory distress). Construction impacts are most significant adjacent to the construction area and the impacts decrease rapidly with distance. While the pollutant concentrations from the project activities may be notable, the distance to the nearest sensitive receptors is such that their impacts would be less than significant.

**e):** The proposed project area is located on Park and District land, away from residential, commercial, or other land uses with large numbers of users. Normally occurring odors from diesel equipment operation would not have the potential to affect a substantial number of people, and the proposed project's activities would have less than significant odor impacts.

## *4.4 Biological Resources*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, U.S. Fish and Wildlife Service, or NOAA - Fisheries? | | ✓ | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | ✓ | | |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means? | | | ✓ | |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | ✓ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | ✓ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | ✓ |
| g) Adversely affect previously established mitigation site(s) for other project(s)? | | | | ✓ |

**Habitat Types**

Habitat types within and adjacent to the project area are described using physical characteristics for un-vegetated areas and plant species composition in a manner similar to Holland (1986). Important physical characteristics that determine plant composition include the presence of calcine and stream flow duration.

The calcine in the project area has a dominant effect on vegetation density and composition. Height and aerial cover of existing vegetation on calcine terraces is low relative to adjacent non-native annual grassland on native soils. Shrubs and trees are generally absent except along the channel edge where unconsolidated substrate may contain non-calcine sediment and seasonal water is available. When present, canopy above calcine is generally composed of overhanging trees rooted on adjacent native soils and older trees rooted in native soils below the calcine deposits.

The geotechnical investigation included several trenches located adjacent to large trees surrounded by calcine. Buried bark and trunk flare indicated that these trees had been growing in native soils *when calcine was deposited. The three trees investigated, including one sycamore (Plantanus racemosa*) and two blue oaks (*Quercus douglasii*) had not developed roots into the calcine and the large supporting roots in the native soils appeared healthy. This indicates that the trees in the Project Area rooted in native soils may survive when calcine is removed.

Variation in plant composition within and between Sites A and B reflect the duration of stream flow and associated depth to groundwater. Tree canopy is classified based on the affinity of species for near surface groundwater. Riparian Scrub and Woodland includes species with a United States Fish and Wildlife Service (Reed, 1988) wetland indicator status of FAC (facultative), FACW (facultative wetland), or OBL (obligate). Mixed Oak–California Bay Woodland includes species classified as FACU (facultative upland) or drier.

The following four habitat types are found within the project area:

Stream Channel

Stream channel includes the generally un-vegetated low flow channel. In Site A, portions of the channel may include a narrow approximately one-foot-wide band of wetland vegetation includ*ing non-native annual species such as annual rabbits foot grass (Polypogon monspeliensis*), and Italian ryegrass (*Lolium multiflorum*).

The upper third of the Site A reach maintains flow for the longest duration in the project area. Stream flow was at the surface on exposed bedrock and cemented calcine during the fall of 2005. Geotechnical borings conducted in September 2005 in the downstream portion of Site A area detected groundwater at a depth of five feet below the surface of the channel and seven feet below the terraced bank in the lower two-thirds of this reach. Flow in the small tributary in Site B is intermittent with apparently no dry season near surface groundwater. Shallow geotechnical trenches and borings up to six feet deep did not encounter groundwater. The upper portion of this reach consists of a deeply eroded narrow channel contained within vertical banks of calcine up to eight feet high. The lower portion has a broad low terrace of calcine. Western sycamore, the only true riparian species that occurs in Site B, indicates that subsurface moisture may be present. The site, however, appears to be significantly drier than Site A with shallow bedrock visible in the channel bottom and willows conspicuously absent.

Riparian Scrub and Woodland

Riparian vegetation is composed of two distinct age classes. Young growth is typically less than 4 inches dbh and includes tree saplings and shrubs rooted in calcine or native alluvium. Mature trees greater than approximately 8 inches dbh are rooted below the calcine in native soil. Woody riparian species rooted within the stream channel in calcine or the native soil below include white alder (*Alnus rhombifolia*), western sycamore (*Platanus racemosa*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*) and sandbar willow (*Salix exigua*). Shrubs on stream terraces include mulefat (*Baccharis salicifolia*).

At the upper portion of Site A several large sycamores and red willows are rooted below the calcine. The understory is devoid of vegetation due to the calcine substrate and extensive shading created by the thick canopy cover.

The central reach of Site A has a more open canopy structure due to the reduced amount of overhanging canopy and the lack of trees rooted below the calcine. Calcine deposits form treeless terraces a few feet above the channel on either side. The channel edge has young woody riparian vegetation consisting of sycamore, alder, willow, and bay and mulefat. The understory is vegetated native herbaceous species such as mugwort (*Artemisia douglasiana*), band iris-leafed rush (*Juncus xiphiodes*) and non-native species including rabbitsfoot grass (*Polypogon monspeliensis*), Italian thistle (*Carduus pycnocephalus*), brome grass (*Bromus sp.*), wild oat (*Avena sp.*), and ryegrass (*Lolium multiflorum*).

The lower reach of Site A consists of a broad floodplain terrace formed from non-calcine alluvium with a small section of braided channel. Woody riparian vegetation includes red willow, blue elderberry (*Sambucus mexicana*), and mulefat. Upland islands within the braided channel are vegetated with small willows, mulefat, mugwort, coyote brush (*Baccharis pilularis*) and Spanish broom (*Spartium junceum*) (CAL-IPC "High" invasive rating).

The lower portion of Site B contains several very old sycamores rooted in bedrock below the calcine. Associated species include poison oak (*Toxicodendron diversilobum*) and non-native annual grasses. No recruitment of sycamore or other riparian species occurs in this reach.

### Mixed Oak–California Bay Woodland and Forest

In the upper portions of both Sites A and B, much of the canopy above the stream channel is composed of mature trees that overhang the channel from slopes above the calcine. Site B, an open canopy woodland, contains California bay (*Umbellularia californica*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), and blue oak (*Quercus douglasii*). In the upper portion of Site A, a closed canopy forest south of the channel is composed of mature California bay and coast live oak rooted in native soil on the adjacent slope. In the upper portion of Site B, several blue oaks have colonized where native alluvium appears to have been deposited on a terrace from small hillside drainages.

### Non-Native Annual Grassland

Vegetation on the slopes adjacent to the lower portion of Site B is non-native annual grassland dominated by wild oats (*Avena fatua*), ripgut (*Bromus diandrus*), slender tarweed (*Madia gracilis*) and yellow star-thistle (*Centauea solstitialis*). Calcine deposits in the upper portion of Site B is dominated by non-native annual species including ripgut brome (*Bromus diandrus*), stickseed (*Torilis arvensis*) and Italian thistle and native species such as blue wild rye (*Elymus glaucus*) and poison oak.

## Special Status Plants

Special status plants known to occur in the vicinity of the project site include grassland, chaparral and serpentine species. Surveys conducted to-date have found only one special status species, Loma Prieta hoita (*Hoita strobolina*).

The soils in the Project Area and vicinity to the northeast are mapped as Montara rocky clay loam, 15 to 50 percent slopes. The Montara series is typically underlain by serpentine bedrock at 8 to 16 inches below the soil surface. However, no serpentine bedrock was observed in the geotechnical investigation of the Project Area. Stream sediments contain some serpentine presumably from the upper watershed to the northeast which is mapped as the serpentine containing Montara series. Soils in the Project Area appear to be derived from sandstone and are similar to the Los Gatos series that is mapped on the adjacent slopes southeast of Hicks Road.

Several large non-serpentine rock outcrops also occur in the lower half of Site B and harbor many individuals of dudleya (*Dudleya cymosa*). Although the project area is mapped as containing serpentine soils, the federally endangered Santa Clara Valley Dudleya (*Dudleya setchellii*) does not occur.

A small stand of the Loma Prieta hoita (*Hoita strobilina*; CNPS list 1B) occurs in the upper section of Site B. These perennial plants grow on a terrace that is mapped calcine. A plan, including transplanting and contingency propagation, would be prepared in consultation with CDFG to mitigate for disturbance to this stand.

**Wildlife**

Existing wildlife species in Sites A and B are those species commonly associated with oak woodland and riparian habitat. Aquatic invertebrates observed in Jacques Gulch include predacious diving beetles (*Dytiscidae* family), dragonfly nymphs (*Anisoptera group*), water striders (*Gerridae* family) and dobsonfly (*Corydalus* sp.) larvae. Herpetofauna identified on the site include Western fence lizard (*Sceloporus occidentalis*), Southern alligator lizard (*Elgaria multicarinata*), Western skink (*Eumeces skiltonianus*), Western toad (*Bufo boreas*), Pacific tree frog (*Pseudacris regilla*) and American bullfrog (*Rana catesbeiana*). Some avian species seen during site visits include Red-shouldered Hawk (*Buteo lineatu*), California Quail (*Callipepla californica*), Northern Flicker (*Colaptes auratus*), Western Scrub Jay (*Aphelocoma californica*), Black Phoebe (*Sayornis nigricans*), Anna's Hummingbird (*Calypte anna*), Western Screech Owl (*Otus kennicottii*) and Barn Owl (*Tyto alba*).

Rainbow trout (*Oncorhynchus mykiss*) and sculpin (*Cottus sp.)* were seen in Jacques Gulch. Largemouth bass (*Micropterus salmoides*) were seen in Almaden Reservoir. The sculpin (*Cottus sp.*) were seen in the shallow portions of the stream in Site A and a few rainbow trout (*Onchorhynchus mykiss*) were stranded in some of the larger pools upstream of Site A (WRA, 2005a). The Alamitos Road culvert between Site A and Almaden Reservoir acted as a barrier to fish species in the winter of 2005/2006 as it was 2-4 feet above the reservoir level due to water drawdowns. By late spring and early summer of 2006, this culvert was in contact with the surface of the reservoir enabling passage of fish species upstream.

The habitat in both Sites A and B appear to be unsuitable for spawning rainbow trout due to high winter water flows and inadequate substrate. The aquatic habitat in between the two sites, however, and the main tributary of Jacques Gulch that follows Hicks Road may provide adequate spawning habitat for this species if accessible. Two other tributaries to Almaden Reservoir, one following Alamitos Road to the west and one draining the southern portion of the watershed into the south side of the reservoir, are known to have spawning populations of rainbow trout (Jae Abel, pers. comm.) and would appear to provide both more suitable spawning habitat and more potential access to spawning habitat than the habitat in Jacques Gulch.

Mammal or mammal signs detected include Western harvest mouse (*Reithrodontomys megalotis)*, mule deer *(Odocoileus hemionus)*, raccoon *(Procyon lotor)*, coyote (*Canis latrans*) and mountain lion (*Felis concolor* ) (WRA, 2005a).

Site A includes part of Jacques Gulch that contains an intermittent stream. Site A had flowing water whereas Site B was completely dry during a September 2005 site visit (WRA, 2005a). Site B provides suitable habitat for fish and amphibian species during the winter and early spring but provides no suitable aquatic habitat by summer's end.

**Special Status Wildlife**

Special status wildlife species, or "sensitive species," are those species designated by the U.S. Fish and Wildlife Service or California Department of Fish and Game as a "listed" (as threatened or endangered), "candidate," "sensitive" or "species of concern."

The study area is within the historic range of the threatened California red-legged frog (CRLF) and California tiger salamander (CTS). The *Almaden Quicksilver Restoration Plan and Environmental Assessment Public Review Draft* recommended surveys for both of these amphibians in order to determine the appropriate level of biological monitoring during construction. The California tiger salamander assessment determined that neither study area contains suitable habitat for the CTS and therefore no impacts associated with the project would be anticipated and mitigation measures and surveys would not be necessary (WRA, 2005b). The CRLF and other sensitive species that have the potential to be affected by the proposed project are discussed below.

California red-legged frog (Rana aurora draytonii), USFWS Threatened, CDFG CSC
The CRLF Habitat Assessment for Jacques Gulch (WRA, 2005a) concluded that there was potential CRLF breeding habitat in the westernmost portion of Site A, where a spring provided intermittent aquatic habitat, as well as Almaden Reservoir. Surveys were initiated following the Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (USFWS, 2005) in the summer of 2005 and completed in July 2006. Jacques Gulch is not believed to be suitable breeding habitat for CRLF due to high water flows during the winter, the presence of predatory fish, and the negative survey findings. However, Jacques Gulch does provide adequate dispersal habitat for CRLF. SCVWD is working USFWS to further discuss the protocol surveys.

Foothill yellow-legged frog (Rana boylii), USFWS Species of Concern
Although the Foothill yellow-legged frog (FYF) was determined to have a low potential for occurrence in the study area (WRA, 2005a) due to the lack of quality aquatic habitat, protocol level surveys for the CRLF would also be useful in detecting the presence of FYF.

Reptiles
The western pond turtle (*Clemmys marmorata*), California horned lizard (*Phrynosoma coronatum frontale*) and silvery legless lizard (*Anniella pulchra pulchra*) all have the potential to occur in or near the project area.

Special Status Mammals
The San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), a USFWS Species of Concern and CDFG Species of Special Concern, has been detected on the site. This species inhabits hardwood forests of moderate canopy with a moderate to dense understory. Nests are constructed out of leaves, shredded grass, and other material.

The western small-footed Myotis (*Myotis leibii*), long-eared myotis (*Myotis evotis*), fringed myotis (*Myotis thysanodes*), long-legged myotis (*Myotis volans*), pallid bat (*Antrozous pallidus*), greater western mastiff bat (*Eumops perotis californicus*), Townsend's western big-eared bat (*Corynorhinus townsendii townsendii*) and Yuma myotis (*Myotis yumanensis)* all have the potential to occur in or near the project area and are all special status species.

Special Status Avian Species
The Long-eared Owl (*Asio otus*), Lewis's Woodpecker (*Melanerpes lewis*), Red-breasted Sapsucker (*Sphyrapicus ruber*), Vaux's Swift *(Chaetura vauxi*). Black Swift *(Cypseloides niger)*, Allen's Hummingbird (*Selasphorus sasin*), Olive-sided Flycatcher *(Contopus cooperi*), Loggerhead Shrike (*Lanius ludovicianus*), California Yellow Warbler (*Dendroica petechia brewsteri*) and White-tailed Kite (*Elanus caeruleus*) all have potential to occur on or near the project site.

**Discussion**

**a):** A number of large trees and snags are located in and near both Site A and Site B. Snags and large trees are an important habitat requirement for bats and cavity nesting bird species. Removal of calcine deposits near and around the larger trees has the potential to disturb or harass these potential roosting sites during daylight hours. If this work is to take place during months when bats may be roosting or hibernating (November through August), construction impacts would be significant. Mitigation Measure Bio-1, however, would reduce impacts to less than significant levels.

### *Mitigation Measures and Best Management Practices*

> **Bio-1 Perform bat surveys.** Potential bat roosts could occur as cavities in the large sycamores at the lower portion of Site B. No large trees are expected to be removed during construction practices; however, work conducted near the large trees in the project area has the potential to disturb potential bat roosts.
>
> If work is to take place during months when bats may be breeding (April through August) or hibernating (November through March), a bat survey shall be conducted. Surveys shall be conducted in late April or early May, when bats are establishing maternity roosts but before the females give birth. If bats are detected, three options may be available. The first and preferred option is to avoid disturbances near the tree (a minimum 100 foot buffer) until after the breeding period has ended but prior to the hibernation period (September through October). The second option would be to permit the encroachment on the 100 foot buffer by construction activities, but under the supervision of a biological monitor. If the monitor observes bats leaving the roost site during construction activities, then all work near the tree will be halted and the appropriate buffer would be reinstated. The third option, exclusion of bats, should only be done as a last resort. The nature of the tree cavities, the rugged terrain and the extensive tree height may prove difficult for the installation of bat exclusion devices. Exclusion devices may include plastic flaps, screening or polypropylene netting of ¼-inch mesh or a short length of PVC pipe. Exclusion devices will be removed upon completion of construction activities.

Since raptors and other birds may potentially nest within the trees, shrubs and grassland that occur in and adjacent to Sites A and B, there is a potential for construction-related impacts to nesting birds. The Migratory Bird Treaty Act of 1918 protects most birds in the United States, including non-status species. Under this legislation, destroying active nests, eggs, and young is illegal. If construction activities occur between March 1 and August 31, the proposed project could result in destruction of active nests, eggs, or young and would be considered a significant impact. Implementation of the following District BMPs would reduce this impact to a less than significant level.

- BI-8, Migratory Bird Surveys
- BI-9, Migratory Bird Nesting Prevention – Vegetation Clearing

(See Appendix A for details)

Vegetation removal will be limited to those areas where removal is necessary for the excavation and removal of calcine. No trees shall be removed solely to prevent migratory bird nesting. Breeding bird surveys will be required before the removal of any vegetation in the project area during the breeding season. Appropriate buffers will be established for any active nest found within the project area.

Burrowing owls usually are associated with the burrows of the California ground squirrel (Thomomys bottae). No ground squirrel burrows were observed in or near the project area. Typical habitat for this species consists of open areas with friable soils. The project area contains neither of these habitat characteristics. In addition, there are no CDFG CNDDB records for this species in the Santa Teresa USGS quadrangle. As a result, burrowing owls are not expected to occur in the project area.

The stick houses of the San Francisco dusky-footed woodrat, a California Department of Fish and Game Species of Concern, have been detected in the study area. Construction and construction-related activity have the potential to disturb the houses of the woodrat, potentially causing abandonment or destroying the houses all together. This would be considered a significant but temporary impact. Implementation of Mitigation Measure Bio-2 would reduce impacts to less than significant levels.

**Bio-2** **Flag and avoid woodrat houses.** Woodrat houses shall be flagged and avoided during construction activities. If disturbance of the stick houses is unavoidable, a qualified biologist shall supervise clearing of the houses. The availability of suitably sized sticks may limit the number of woodrat houses. Sticks from the dismantled house shall be kept onsite, near the dismantled house if possible.

No sensitive herpetofauna species were detected during site visits or surveys for the federally threatened California red-legged frog; however, if construction activities were to impact previously undetected species, impacts could be significant. Mitigation Measure Bio-3 would ensure those sensitive reptiles and amphibians with potential to occur in the study area, as well as common herpetofauna species, are not harmed or harassed during construction related activities.

**Bio-3** **Erect exclusion fencing and monitor for previously undetected species.** If required by the U.S. Fish and Wildlife Service or the California Department of Fish and Game, an exclusion fence shall be erected around the perimeter of the construction area to prevent species from entering the construction site, and a construction monitor shall be present during ground clearing activities to remove any wildlife species found within the fenced area. Preconstruction and cursory surveys will be done in the project area in order to detect sensitive herpetofauna. A construction monitor will also be present during ground clearing activities to remove any wildlife species found within the fenced area. If a CRLF is observed in the construction area, relocation of the species to a pre-approved area would be permitted by a USFWS-approved biologist with agency correspondence.

Construction activities associated with the proposed project have the potential to adversely affect native fish species and aquatic invertebrates located in Jacques Gulch. Impacts during construction may include dewatering of the stream and increases in sedimentation. Though no special status aquatic species reside in Almaden Reservoir or Jacques Gulch, the RWQCB considers aquatic species a beneficial use in the form of non-contact water recreation, fish spawning, wildlife habitat and warm and cold freshwater habitat. Sediment and runoff control from construction activities associated with the project would be controlled by construction Best Management Practices (BMPs). Implementation of the following District BMPs would reduce impacts to less than significant levels.

- BI-2, Salvage Native Aquatic Vertebrates from Dewatered Channels
- WQ-41, Stormwater Prevention Pollution Plan

(See Appendix A for details)

One special status plant is known from the project area, the Loma Prieta hoita, *Hoita strobilina* (CNPS List 1B). Three patches occupying approximately 50 square feet are growing on calcine deposits in Site B. Removal of these plants is necessary to excavate the underlying calcine. This would be considered a significant impact, but implementation of Mitigation Measure Bio-4 would reduce impacts to be less than significant.

**Bio-4** **Remove and salvage Loma Prieta hoita.** Mitigation for the Loma Prieta hoita shall be included in the Riparian Mitigation and Monitoring Plan prepared as part of the Streambed Alteration Agreement application for CDFG. This plan shall include transplanting techniques, a monitoring program acceptable to DFG, performance criteria and contingency propagation measures to ensure that a stand of Loma Prieta hoita is restored within the project area. After removal, the plants shall be held in a nursery until the excavation and grading of the project area is complete. After construction, the plants shall be replanted in a shaded understory area in Site B. A contingency plan involving collection of ripe seeds from the plants shall ensure that any mortality of transplanted individuals can be compensated with planting of the collected seeds. In order to ensure viable seed is available for collection, the District shall install exclusionary fencing around the plants during the flowering period to minimize browsing by deer.

**b):** Excavation of calcine deposits would require removal of riparian scrub composed of small diameter (< 4 inches) trees and shrubs rooted within the calcine. Vegetation on the remaining calcine deposits is a sparse cover of non-native annual upland grass and herbaceous species. Most canopy over calcine areas is composed of overhanging trees from adjacent uplands and large riparian trees (> 8 inches) rooted below the calcine and would not be affected. Some trimming of canopy would be necessary to provide access for excavation equipment if the site is accessed via Site B Temporary Access, Option 1. Access to Site B via Site B Temporary Access, Option 2 would require the removal of approximately ten trees, a mix of oaks and bay (see Figure 1-6). Calcine removal adjacent to large trees would avoid root and trunk damage; however, mortality of some large trees rooted below calcine is expected.

Following calcine removal, riparian trees and shrubs would be planted in all suitable locations. Initial planting density would be designed to allow for seedling mortality and to produce a mature canopy similar to adjacent areas unaffected by calcine areas. Removal of calcine and grading of the stream channel would also require the removal of eleven trees that are rooted in the calcine (Table 4.4.1). Individuals of arroyo willow, California bay, and coast live oak would be affected. These individuals are relatively young (they have grown since the calcine was deposited) and are not of substantial quality due to their poor substrate. Some trimming of canopy would be necessary to provide access for excavation equipment. Calcine removal adjacent to large trees would avoid root and trunk damage, however, mortality of some large trees rooted below calcine is expected. Although they do provide habitat for small birds, they would be replaced at a level that is greater than those removed. Additionally, mortality of an unknown number of riparian and oak and bay trees that are rooted in native soils below calcine can be expected. Planting in subsequent years following initial restoration would provide an opportunity to replace these trees.

**Table 4.4-1. Trees Impacted by Jacques Gulch Restoration Project**

| ID | Species | Species | DBH (in) |
|---|---|---|---|
| Site A | | | |
| 45 | Salix | arroyo willow | 8 |
| 46 | Salix | arroyo willow | 6 |
| 50 | Salix | arroyo willow | 8 |
| 64 | Salix | arroyo willow | 20 |
| Site B | | | |
| 110 | UmCa | Calif. bay | 8 |
| 134 | UmCa | Calif. bay | 4 |
| 158 | UmCa | Calif. bay | 6 |
| 111 | UmCa | Calif. bay | 8 |
| 133 | QuAg | coast live oak | 5 |
| 136 | QuAg | coast live oak | 7 |
| 137 | UmCa | Calif. bay | 4 |

The impacts associated with the removal of this vegetation would be significant. However, the restoration plan calls for replacement of riparian vegetation and the overall net effect would be an increase in the area and quality of riparian vegetation. Riparian habitat would be replaced to mitigate impacts to the existing vegetation. Red willow, blue elderberry, alder, sycamore, and mule fat would be replanted at a level that would exceed impacts to the current community. All calcine removal areas without overhanging canopy would be planted with tree and shrub species appropriate for the restored location. A planting plan would be prepared as part of the Mitigation Monitoring Plan for the Streambed Alteration Agreement with CDFG and CWA Section 404 and 401 permits with the USACE and RWQCB. The Mitigation and Monitoring Plan will describe the performance criteria, adaptive management strategies, and scheduled replanting that would ensure establishment of riparian vegetation of greater area and value than the Mixed Oak–California bay woodland impacted by calcine removal. No additional mitigation is required with implementation of the final planting plan.

The RWQCB identifies nineteen beneficial uses for water bodies. Almaden Reservoir is listed as containing eight of these beneficial uses: Cold Freshwater Habitat, Groundwater Recharge, Municipal and Domestic Supply, Water Contact Recreation, Noncontact Water Recreation, Fish Spawning, Warm Freshwater Habitat and Wildlife Habitat. Construction activities in Jacques Gulch have the potential to negatively affect the Wildlife Habitat beneficial use for this waterbody which would be considered a significant impact. Implementation of Mitigation Measures Bio-1, Bio-2, Bio-3, and Bio-4 and the following BMPs would reduce impacts to less than significant levels.

- Bio-1 Perform bat surveys and exclude bats from establishing roosts.
- Bio-2 Flag and avoid woodrat houses.
- Bio-3 Erect exclusion fencing and monitor for previously undetected species.
- Bio-4 Remove and salvage Loma Prieta hoita.
- BI-2, Salvage Native Aquatic Vertebrates from Dewatered Channels
- BI-8, Migratory Bird Surveys
- BI-9, Migratory Bird Nesting Prevention – Vegetation Clearing
- WQ-41, Stormwater Prevention Pollution Plan

(See Appendix A for details)

**c):** The excavation of calcine and regrading of the stream channel would temporarily affect waters of the U.S. under Section 404 of the Clean Water Act. The U.S. Army Corps of Engineers has jurisdiction over this area and typically requires a 1:1 mitigation for impacted waters. Since this is a restoration project and the stream would be returned to a more natural state with no reduction in length (in fact the length may increase due to channel realignment), no mitigation is required.

**d):** The proposed project would not result in interference with the movement of any native species. No movement corridors for fish or wildlife species were identified in the project area. Impacts would be less than significant and no additional mitigation measures are required.

**e):** As the proposed project is a part of the Almaden Quicksilver Restoration Plan established with the USFWS and the CDFG, there are no significant conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impacts would occur.

**f):** No established mitigation sites for other projects occur within the proposed project limits.

## *4.5 Cultural Resources*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | | ✓ | | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | | ✓ | | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | ✓ | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | ✓ | | |

### Cultural Resources Investigation

The staff at the California Historical Resources Information System, Northwest Information Center (NWIC) conducted a record search of the project vicinity on May 2, 2006 (NWIC File No. 05-1032). The record search included a review of all cultural resource and excavation reports and recorded archaeological sites within a half-mile radius of the project area. The study included a review of archaeological, ethnographic, historical, and environmental literature, as well as records and maps on file at the California Archaeological Inventory.

The NWIC records search indicated that one cultural resource has been previously recorded within a half-mile radius of the project area: the New Almaden Historic District. The resource is included in the Directory of Properties in the Historic Property Data File (#015437). It has been designated a State Historic Landmark (#339 and #339-1), and was listed in the National Register of Historic Places as an individual property in 1966. The Jacques Gulch project area does not fall within the Historic District and no cultural resources have been recorded within the project area.

Although the nearby New Almaden Historic District has been studied intensively, a search of the NWIC database indicates that no studies have been undertaken within the Jacques Gulch project area. A project archaeologist [William Self Associates, Inc. (WSA)] conducted a pedestrian field survey of the proposed project area on May 4, 2006. The entire area anticipated to be disturbed by project construction was surveyed.. Some of the project area has been covered with asphalt and has been highly disturbed by road construction. All exposed ground surfaces were examined for evidence of prehistoric and historic debris that could indicate the presence of buried cultural deposits.

The project archaeologist identified two portions of historic fence line within the project area, along with two isolated chert flakes. No significant cultural resources were identified.

### Native American Consultation

A letter addressed to the Native American Heritage Commission (NAHC) was sent on April 27, 2006. It described the project and provided a map of the project area. The letter included a request for a listing of local, interested Native American representatives and information on traditional or sacred lands within the project area and vicinity. The NAHC sent a response on May 5, 2006, which stated that a "search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area." No individual or tribal members have been notified as part of this report. The NAHC response included a list of individuals to solicit comment on the project's environmental document, if desired.

### Discussion

**a):** The record search indicated that a significant historic cultural resource is known to be present in the vicinity of the project (i.e., the New Almaden Historic District). However, the resource is outside of the proposed project area and would not be impacted by the project. The record search also indicated that the Jacques Gulch project area had not been the subject of any previous cultural resource surveys. As a result, an intensive pedestrian reconnaissance of the project area was conducted for the project.

Since no significant historic resources were identified during the survey within the Jacques Gulch project area, the project would not adversely affect previously recorded historical resources. Consequently, impacts to identified historical resources would be less than significant, and no mitigation measures are required in this regard. However, the presence of historic cultural material in the project area and the proximity of the New Almaden Historic District indicate the possibility that ground-disturbing project activities have the potential to directly affect unknown cultural deposits that are now buried.

A potentially significant impact would occur if ground-clearing or ground-disturbing activities exposed previously unknown buried cultural resources, which could be considered significant historic resources to disturbance, damage, or destruction. Historic resources include glass, metal, ceramics, wood and similar debris. Implementation of Mitigation Measure Cult-1a would reduce the impact to a less than significant level.

**Cult-1a** **Stop earthwork if unknown historic or prehistoric resources are detected.** Prior to commencement of earth disturbing activities, construction crews shall be trained by a qualified archaeologist to recognize potentially historic cultural deposits. In accordance with CEQA Guideline §15064.5 (f), should any previously unknown historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable soils, glass, metal, ceramics, wood or similar debris, be discovered during grading, trenching, or other onsite excavation(s), earthwork within 100 feet of these materials shall be stopped until a professional archaeologist certified by the Registry of Professional Archaeologists (RPA) has an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary to protect the resource.

**b):** No significant prehistoric archaeological resources were identified during the survey within the Jacques Gulch project area. Consequently, the project would not adversely affect previously recorded archaeological resources, so impacts to identified prehistoric archaeological resources would be less than significant, and no mitigation measures are required in this regard. However, the presence of prehistoric cultural material in the project area indicates the possibility that ground-disturbing project activities have the potential to directly affect unknown archaeological deposits that are now buried.

A potentially significant impact would occur if ground-clearing or ground-disturbing activities exposed previously unknown buried cultural resources, which could be considered significant prehistoric resources, to disturbance, damage, or destruction. Indicators of prehistoric site activity include charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, and pockets of dark, friable soils. The presence of prehistoric lithic material in the project site indicates the possibility that other buried prehistoric resources might be discovered inside the project site. Implementation of Mitigation Measure Cult-1a would reduce the impact to a less than significant level.

- Cult-1a Stop earthwork if unknown historic or prehistoric resources are detected.

**c):** No significant paleontological resources were identified during the survey within the Jacques Gulch project area, and the potential for paleontological resources to occur in the project area are low. No unique geographic features are located within the project area. Consequently, impacts to unique paleontological resources or geologic features would be less than significant, and no mitigation measures are required in this regard.

**d):** A significant impact would occur if ground-clearing or ground-disturbing activities (including grading, bulldozing, excavation, drilling, brush-hogging, mowing, etc.) disturb, damage, or destroy Native American human remains and/or funerary objects, in the project area. Implementation of Mitigation Measure Cult-2a would reduce the impact to a less than significant level.

**Cult-2a** **Discovery of Native American Human Remains.** In the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code should be followed. Section 7050.5(b) of the California Health and Safety Code states:

- In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.
- The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within twenty-four hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for "protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction." A combination of preconstruction worker training and intermittent construction monitoring by a qualified archaeologist will serve to achieve compliance with this requirement for protection of human remains. Worker training typically instructs workers as to the potential for discovery of cultural or human remains, and both the need for proper and timely reporting of such finds, and the consequences of failure thereof. Once the find has been identified, the archaeologist will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be significant according to CEQA.

## *4.6 Geology and Soils*

Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

| | Potentially Significant Issues | Potentially *Significant* Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | ✓ | |
| ii) Strong seismic ground shaking? | | | ✓ | |
| iii) Seismic-related ground failure, including liquefaction? | | | ✓ | |
| iv) Landslides? | | | ✓ | |
| b) Would the project result in substantial soil erosion or the loss of topsoil? | | ✓ | | |
| c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | ✓ | |
| d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | ✓ | |
| e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | ✓ |

### Geology

The geologic units mapped in the area of the proposed project are described as Melange of the Central Belt and Basaltic Volcanic Rock Blocks of Cretaceous age. The mélange matrix consists of sheared argillite and metastone metamorphosed to pumpellyite and locally to lawsonite. The Basaltic Volcanic Rock Blocks also contain pumpellyite and lawsonite along with amphibole and jadeitic pyroxene (R.J. McLaughlin, et al., 2001).

**Seismicity**

No active faults have been identified within the project area, and the proposed project would not be located within the State of California's designated Special Fault Study Zone (Alquist-Priolo Earthquake Fault Zones Act). Therefore, the risk of primary seismic hazards such as fault rupture in the project area is not anticipated. There are, however, several active faults located in close proximity to the proposed project. These active faults include the Monte Vista-Shannon Fault (1.4 km away), Sargent Fault (5.8 km away), and San Andreas Fault (8.3 km away). Because there are several active faults close to the proposed project, strong ground shaking can be expected in the project area during moderate to severe earthquakes that occur along these faults and others in the region.

Severe ground shaking in the project area could trigger liquefaction. The project area is not located within a zone of potential liquefaction as listed on the Seismic Hazard Zone Map prepared by the California Geological Survey (CGS, 2003); however loose sands were encountered at Site A, northwest of Alamitos Road and northeast of the creek. Quantitative calculations were performed on soil borings from these areas to determine the liquefaction potential. The calculations indicate that there is a high potential for soil to liquefy northwest of Alamitos Road. Based on the thickness of the sandy native soils in the area, it is likely that liquefaction would result in surface manifestations, such as sand boils. Other potential liquefaction-related potential hazards, such as flow slides and lateral spreading, have a low potential to occur in this relatively flat terrain. Ground settlement could also result from liquefaction; however the potential impacts from seismic settlement should not impact the proposed project.

**Soils**

A detailed geologic investigation and mapping of the project area that included exploratory borings and test pits, and analytical testing of soil samples was performed by Northgate Environmental Management, Inc. (NEM, 2006). Results of this investigation determined the subsurface lithology for Sites A and B of the project area.

Site A

Site A contains four geologic categories based upon engineering characteristics: native alluvial soils, native colluvial soils, calcine (fill), and very dense gravel and cobble deposits/bedrock. These soil types are described below.

- Native alluvial soils encountered consist of various layers of sandy gravel, gravelly sand, silty sand and sandy clay. In the area near Alamitos Road, the borings encountered dense sandy gravel in the top 3 to 4 feet bgs. Loose sandy layers found beneath the sandy gravel extended to the bottom of Boring B-3 to a depth of 15 feet. Further upstream, the gravelly and sandy layers became medium dense and dense.
- Native colluvial soils encountered are derived from bedrock materials consisting of dark brown silt or dark brown clayey sand. In addition, some of the silt material adjacent to Hicks Road contained glass fragments and metallic debris.
- The calcine soils are generally classified as sandy gravel and are generally reddish brown in color. In Site A, the calcine is mixed with other non-calcine alluvial gravels and sands. The calcine is generally medium dense and dense. Where exposed in the bottom of the creek, the calcine is cemented and very dense resembling concrete. This very dense cemented layer is approximately one foot thick.
- Although none of the borings or test pits encountered very dense gravel and cobble deposits/ bedrock, bedrock was visible in outcrops at the eastern limits of the creek above Site A. The bedrock appeared to be highly fractured, gray, basaltic volcanic rock.

Site B

Site B contains three geologic categories based upon engineering characteristics: native colluvial soils, calcine (fill), and very dense gravel and cobble deposits/bedrock. These soil types are described below.

- Native colluvial soils encountered are derived from bedrock materials consisting of dark brown silty and sandy clay.
- The calcine soils are generally classified as sandy gravel or gravelly sand and are generally reddish brown in color. The calcine is generally medium dense and dense. Where exposed in the bottom of the creek and in some of the exposed erosional features the calcine is cemented and very dense resembling concrete. This very dense cemented layer is approximately one foot thick. The calcine in Site B appears to have been nearer to the source and is not mixed with native alluvium.
- Some of the borings and test pits encountered very dense gravel and cobble deposits/bedrock. Bedrock was visible in various outcrops along the creek. Bedrock appeared to be highly fractured, gray, basaltic volcanic rock.

This evaluation of potential geologic, seismic, soil, and mineral resource impacts is based on the following sources of information: data collected during field reconnaissance; a review of the most current regional information published by the California Geological Survey (formerly the California Department of Mines and Geology), and the Association of Bay Area Governments (ABAG); and a review of the project description. Impacts on mineral resources also relied on information gathered from a review of pertinent literature, including local general plans and relevant EIRs.

**Discussion**

a): ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

i): ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

No active faults are known to pass through the project area, and the proposed project is not located within the State of California's designated Special Fault Study Zone (Alquist-Priolo Earthquake Fault Zone). Therefore, fault rupture through the project area is not likely to occur. However, because the proposed project is located within a seismically active area, the possibility of ground surface rupture associated with fault movement cannot be dismissed.

Operation of the proposed project would result in the presence of a new culvert at the Alamitos Road crossing. This culvert would be constructed according to the latest version of UBC guidelines and specifications governing excavation and grading, compaction of soils and fill, and other project activities, as well as use of specific construction materials. Therefore, potential impacts on project structures are less than significant. In addition, implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Thus, the potential impact on humans from fault rupture is less than significant.

***ii) Strong seismic ground shaking?***

Although no known active faults have been identified within the project area, strong ground shaking can be expected to occur at the project area during moderate to severe earthquakes in the region. Recent Bay Area Shaking Hazard Maps from the Association of Bay Area Governments

(ABAG, 2003) indicate that the project area could experience moderate to strong seismic ground shaking during earthquake events on nearby active faults, including the Monte Vista–Shannon, Sargent, and San Andreas Faults. Impacts, however, would be less than significant.

***iii) Seismic-related ground failure, including liquefaction?***
The project area is not located within a zone of potential liquefaction as listed on the Seismic Hazard Zone Map prepared by the California Geological Survey (CGS, 2003). However, the geotechnical field investigation identified loose sands at Site A, northwest of Alamitos Road and northeast of the creek (Northgate Environmental Management (NEM), 2006). Further calculations indicated that the area immediately northwest of Alamitos Road has a high potential to liquefy during a major earthquake, and may potentially experience up to several inches of seismic settlement. However, the potential for liquefaction-related flow slides and lateral spreading in this area is low. The expected impacts from liquefaction are relatively small and should not impact the culvert structure or the road at the Alamitos Road crossing. The culvert would be constructed according to the latest version of UBC guidelines and specifications. Therefore, the potential impact to structures is less than significant. In addition, implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Therefore, the potential impacts on humans from seismic ground shaking are less than significant.

***iv) Landslides?***
The Jacques Gulch Restoration Project geotechnical investigation and the California Geological Survey Seismic Hazard Zones Map indicate that no mapped landslides have been identified within the project area (NEM, 2006 and CGS, 2003). Implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Thus, the potential impact on humans from landslides is less than significant. Operation of the proposed project would result in the presence of a new culvert at the Alamitos Road crossing at Site A. However, Site A is relatively flat, and therefore not susceptible to slope failure. Thus, potential impacts on project structures are less than significant.

**b)**: Construction would involve substantial ground disturbing activities, including excavation and removal of calcine, channel realignment, and grading at Sites A and B, as well as reconstruction of the culvert under Alamitos Road at Site A. This process would expose unvegetated soils in the project area, which could accelerate erosion and sedimentation. Areas disturbed during the construction phase would likely remain unvegetated or sparsely vegetated during the early portion of the proposed project's operation, and therefore would be vulnerable to erosion. However, operation of the proposed project would result in several features that would assist in reducing erosion. The proposed project would realign the channel at Sites A and B; grade existing eroding banks and hill slopes, as well as the channel itself to create more stabilized features; and revegetate the banks with riparian vegetation. In addition, other erosion reduction measures would be implemented at Site A, including the construction of a temporary sediment retention basin at the lower reach of the site near Alamitos Road; the restoration and protection of an eroded road edge and embankment at the intersection of Hicks and Alamitos Roads; and the installation of a stone energy dissipater below the culvert outfall.

Construction of the proposed project could accelerate erosion, and would be potentially significant. However with the implementation of the following BMPs, the impact would be reduced to less than significant.

- WQ-9, Minimize Local Erosion Increase from In-channel Vegetation Removal
- WQ-17, Prevent Scour Downstream of Sediment Removal
- WQ-41, Stormwater Pollution Prevention Plan

(See Appendix A for details)

**c):** Geologic conditions exist within a portion of Site A that are conducive to liquefaction. However, overall soil conditions within the project area are generally stable and the proposed project would not alter these conditions. Therefore, the potential impacts of the proposed project on soil stability would be less than significant.

**d):** The project area may include expansive soils as defined by the UBC. However, all project construction activities, including construction of the culvert under Alamitos Road, as well as grading and excavation, would be completed according to the latest version of UBC guidelines and specifications. In addition, all recommendations regarding site preparation and grading, and geotechnical design of the culvert foundation provided in the geotechnical report (NEM, 2006) would be implemented as part of the proposed project. Therefore any potential impacts from expansive soils would be less than significant.

**e):** The proposed project would not involve the construction or operation of septic tanks or other waste disposal systems. Therefore, the proposed project would have no impacts related to wastewater disposal.

### 4.7 Hazards and Hazardous Materials

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | ✓ | | |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | ✓ | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | | | | ✓ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | ✓ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | ✓ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | ✓ |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | ✓ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | ✓ |

Mercury in the environment occurs both naturally and as the result of anthropogenic activities, such as combustion and mining. Much of the mercury contamination that exists globally is believed to be due to wide-spread atmospheric dispersion of mercury emissions (that may have originated at distant locations) and subsequent deposition to the ground and water. In the New Almaden area, mercury contamination can be traced to natural conditions and, especially, to historic mining and ore processing. The two project sites proposed for restoration contain calcine and mining debris, which historically accumulated in the project vicinity and were transported to the sites from higher elevations by storm events. Mercury concentrations in the calcine onsite range from natural background up to a maximum of 37 ppm. The 95th percentile upper bound confidence limit of the arithmetic mean is 18.5 ppm. Under low water flow conditions in Jacques Gulch, calcine within the wetted area of the streambed may contribute dissolved mercury to the water column. During high flows, calcine and other mining debris can be eroded, washed down the stream, and deposited in Almaden Reservoir.

Mercury in the environment is of concern because of its potential adverse effects on the health of humans and wildlife. There are a number of pathways by which mercury can enter the body. Inhaled elemental mercury vapor is highly absorbed by the body at a rate of approximately 70-80% while inorganic mercury is more moderately absorbed, at a rate ranging from 2 to 38%, depending on the form of mercury. Inhalation exposure of metallic mercury vapors results in toxic effects to the kidneys and central nervous system (CNS). Higher levels affect the respiratory and cardiovascular system as well as the gastrointestinal tract. CNS effects include cognitive, sensory, personality and motor disturbances, tremors, insomnia, memory loss, neuromuscular changes and headaches. Mercury exposure has been reported to cause adverse neurological and behavioral changes in experimental animals. The Cal EPA Office of Environmental Health Hazard Assessment (OEHHA) lists an acute reference exposure level (REL) for inhalation exposure to inorganic mercury of 1.8 $\mu g/m^3$. The target organ for acute mercury exposure is the reproductive system, specifically prenatal development. CNS effects such as tremors may also occur following acute exposure. Mercury and mercury compounds are listed as developmental toxicants on the State's Proposition 65 list (OEHHA, 2006). OEHHA based the chronic reference exposure level for inorganic mercury on the observation of hand tremor, memory disturbances and neurobehavioral dysfunction in humans and set the level of the chronic REL to 0.09 $\mu g/m^3$. Both the U.S. EPA and California EPA list the maximum contaminant level (MCL) for mercury in drinking water to be 0.002 mg/l. OEHHA lists a public health goal for inorganic mercury in drinking water of 0.0012 mg/l or 1.2 ppb. The U.S. EPA lists an inhalation reference concentration (RfC) for inorganic mercury of $3 \times 10^{-4}$ $mg/m^3$ based on results of human occupational inhalation studies. The critical effects observed upon which the RfC is based include hand tremor and increases in memory disturbances.

Mercury can exist in different forms: elemental or metallic mercury, inorganic mercury (mercury salts) and organic mercury. Mercury in the atmosphere is predominantly elemental mercury vapor and inorganic mercury; in water, soil, plants and animals, the primary forms are inorganic mercury and organic mercury. Methylmercury is the mercury compound of greatest concern in the environment, due to its prevalence, bioaccumulation potential and toxicity. A concern would be the presence of residual calcine in the restored watershed contributing to the formation of methylmercury if wetlands were created or established. However, no wetlands will be constructed as part of the restoration project. The one small area where a wetland could form will be graded so as to prevent creation of a seasonal wetland.

Environmental mercury is transformed or cycled between its various forms by biotic and abiotic processes that are not fully understood. Methylation of mercury in water is the first step in the entrance of mercury into the food chain. Elemental mercury is transformed to methylmercury in a process that involves at least two steps. First, elemental mercury is oxidized to inorganic mercury. The second step involves methylation of inorganic mercury and is accomplished by microorganisms (bacteria, fungi) present in soil, water, and sediment under aerobic and anaerobic conditions. Sulfur-reducing bacteria have been shown to be involved in the methylation of mercury, particularly under anaerobic (low dissolved oxygen) conditions. Other conditions that can affect the biotransformation of mercury to methylmercury in water include pH, temperature, the presence of dissolved organic material, salinity, and the level and form of sulfur in water. According to a study in an unpolluted estuarine environment, the main factor that affected production of methylmercury was the amount of organic material accumulated at the bottom of the estuary. The amount of mercury present in the water was not shown to influence methylmercury concentration in sediment.

Absorption of inorganic mercury present in water by aquatic organisms can occur, but uptake is slow and inefficient compared to uptake of methylmercury present in water. Entry of methylmercury into the food chain begins with the bacteria that convert mercury to methylmercury. These methylmercury-containing bacteria may be consumed by organisms at the next higher level of the food chain or they may excrete the methylmercury to the aqueous environment where it may adsorb to plankton, which may be consumed by the next higher level of the food chain. In this manner and due to the fact that animals accumulate methylmercury more quickly than they excrete it, mercury concentrations are biomagnified at each higher level of the food chain. Methylmercury in water is accumulated and biomagnified in aquatic organisms such that concentrations in predator fish at the top of the food chain can be up to one million times greater than the concentration found in the surrounding water. In most fish, 90 to 100% of mercury present in tissues is in the form of methylmercury.

In the past, several water column and sediment samples within the Guadalupe Watershed and a few in the Jacques Gulch area were analyzed for mercury and organic mercury. Organic mercury has been consistently found to be present in low nanograms per liter of water indicating that mercury methylization is occurring in the watershed. Thus, conditions exist that allow for methylmercury formation.

Residual calcine and other mining wastes left in any wetlands present the potential for methylmercury formation and resultant impacts to wildlife. An excellent linkage analysis describing the links between sources of mercury in the Guadalupe River Watershed and wildlife targets is found in the Mercury Project TMDL Report (SFBRWQCB, 2006). This analysis also discussed a seasonal cycle of methylmercury formation in the watershed consistent with the above discussion. Methylmercury is predominantly found during low-flow anoxic conditions found during the fall months, before winter rains begin. The highest fraction of methylmercury to total mercury (~30%) occurs during the late dry season. The report concludes with impoundment methylmercury allocation recommendations of 3.0 ng/l methylmercury for the Guadalupe, Almaden, and Calero Reservoirs.

Pending SCVWD Board of Directors' approval of the project's planning study, SCVWD will prepare design plans and specifications for approval by DTSC, consistent with DTSC's requirements for remedial design.

### Discussion

**a):** The exposed calcine surface in Jacques Gulch is relatively low as compared to the total volume, because of the depth of the calcine deposits. However, over time, natural processes will continue to erode the deposits and allow calcine-rich sediments to migrate downstream. Removal of the calcine removes this future potential.

Excavation of calcine has the short-term potential to increase the amount of mercury-contaminated dust in the vicinity. This could increase the amount of mercury on adjacent lands and in Almaden Reservoir, as compared to current conditions. Dust from the excavation work could increase the opportunity for inhalation. The distance to the nearest residences and the low rate of use in this area of the Park reduce this risk, as compared to other more developed areas. Nevertheless, airborne dust could pose a risk to workers and visitors on and near the site. To achieve the goal of reducing potential impacts of mercury methylization on wildlife, the project would remove all visible calcine which would have the effect of restoring the landscape to mercury levels approaching pre-mining soil mercury concentrations. Thus, the only mercury concentrations remaining in the soils after project completion would approximate pre-mining concentrations (i.e., naturally occurring background levels) which would result in an insignificant risk to wildlife.

Implementation of Mitigation Measures Haz-1 and Haz-2 would reduce these risks to less than significant levels.

**Haz-1** **Implement a worker safety and health program.** To protect workers during excavation, removal, transport, and consolidation of calcine and soil, a worker safety and health program shall be developed consistent with regulations and in light of site conditions. Such a program is required by CalOSHA. It is anticipated that Level D Personal Protective Equipment would be worn by all workers involved in or near to soils disturbance and movement, however, final determination of the required level of protection will be made at the time of project execution. Worker skin contact with contaminated soils, inhalation of dust, and contact with ground or surface water shall be minimized. All workers and site visitors shall be informed of the relevant aspects of the safety and health program and the responsible contractor shall monitor and enforce compliance. Risk management practices to be taken before, during, and after soil disturbance, excavation, and transportation shall include restricting the site to only those workers and individuals necessary for execution or inspection of the work. Visitors and other non-essential managers and personnel shall be kept at a distance adequate to ensure their safety. Visitors to the site shall be provided appropriate Personal Protective Equipment. The part of the site where active removal is occurring shall be fenced with temporary construction-type chain link fences at least 8 feet high to prevent unauthorized entry and the fence maintained for the duration of soil disturbance activities. The fence can then be removed or relocated to another active area.

**Haz-2** **Implement a fugitive dust control program.** A fugitive dust control program shall be developed, approved, and implemented. The program will ensure that workers and the public are not exposed to harmful levels of soils and dusts generated during calcine or soil removal and transport. Fugitive dust control measures shall be implemented per a detailed program developed by the contractor and submitted to the District. Unless otherwise determined by the District or an appropriate regulatory body to not be required, this program shall include an onsite Air Quality Monitor (AQM), a Dust Control Plan (DCP), monitoring of the project sites and the transport route for visible dust plumes, and the application of more frequent and more extensive dust control methods, should standard methods be unable to control dust formation and migration. A temporary site shutdown may be ordered if efforts do not result in the cessation of dust generation.

Dust control measures shall be implemented and shall consist of the following:

- The project shall designate and retain onsite an Air Quality Monitor (AQM) who shall be responsible for directing and documenting compliance with dust control measures for the entire project site and transportation route to the consolidation area. The AQM shall have full access to all areas of excavation and loading on the site, and shall have the authority to stop any or modify all activities as warranted in order to ensure that these dust control measures remain adequate to control dust generation.
- A Dust Control Plan (DCP) shall be developed and implemented to prevent the generation of dust during soils movement. The plan shall include measures to ensure the following:

- All unpaved roads and disturbed areas in the project site shall be watered as frequently as necessary to comply with the dust mitigation objectives. The frequency of watering can be reduced or eliminated during periods of precipitation.
- No vehicle shall exceed 15 miles per hour within the site or on any unpaved road along the transport route to the soils repository.
- All site entrances shall be posted with visible speed limit signs.
- All vehicles leaving the site that have ridden on contaminated soil shall have their tires inspected and dirt removed and/or washed as necessary to be cleaned free of dirt prior to leaving the site and/or entering paved roadways. This is done with metal pikes, large wire brushes, and water. The volume of water is to be kept at a minimum and kept contained. Decontamination of vehicle tires shall be conducted. This can be done on top of 50-mil Visqueen plastic sheets with small berms on the perimeter to keep the water/soil from flowing off except into collection areas, or, if Visqueen plastic is not used, gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- Soil removal areas adjacent to any paved roadway shall be provided with sandbags or other measures as required to prevent runoff to roadways.
- All soil storage piles and disturbed areas that remain inactive for longer than 2 days, or if high wind conditions exist, shall be covered or shall be treated with appropriate dust suppressant compounds.
- All vehicles that are used to transport excavated material to the consolidation area and that have potential to cause visible dust emissions shall be provided with a cover or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
- Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all areas of soil that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.
- The AQM shall monitor all soil removal activities on the site and the transport route for visible dust plumes. Observations of visible dust plumes that have the potential to be transported: (1) off the project site; (2) 100 feet beyond the centerline of the transport route; (3) within 25 feet downwind of any soil removal/excavation activity; (4) within the presence of onsite workers such that they will become exposed to an inhalation hazard shall be an indication that existing dust suppression/control measures are not resulting in effective mitigation. The AQM shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:

  Step 1 The AQM shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.

  Step 2 The AQM shall direct implementation of additional methods of dust suppression if Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination.

  Step 3 The AQM shall direct a temporary shutdown of the activity causing the emissions if Step 2 specified above fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQM is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source.

**b):** Materials proposed for use during the project that could pose a hazard risk are diesel fuel, gasoline, oil, and other lubricants specific to heavy machinery. These would be onsite only in quantities sufficient to operate the equipment, similar to typical excavation and grading projects elsewhere. Small routine releases could be readily contained and cleaned up. Therefore, this would be a less than significant impact.

**c):** No existing or proposed schools are within ¼ mile or nearby the project area; therefore, there are no impacts.

**d):** This project involves the transport of calcine and mining debris to an existing consolidation site on Mine Hill. The Mine Hill site is where calcine materials have been previously consolidated and capped during remedial actions implemented elsewhere in the Park, under the oversight of the California Department of Toxic Substances Control (DTSC). Therefore, hazardous waste from this project would be added directly to an existing hazardous waste depository. No disturbance of the existing waste would occur. Therefore, this project would have no impact on the existing hazardous waste site.

**e) and f):** No airports lie within two miles of any part of the proposed project; therefore, there is no impact to public safety associated with aircraft operations or an aircraft safety hazard for workers or nearby residents.

**g):** This project would occur in an undeveloped area and access would be provided via a rural access road. Project activities would not involve total obstruction of existing roadways, and work would not impair or interfere with adopted emergency response plans or emergency evacuation plans. Therefore, no impacts would occur as a result of the project.

**h):** The project does not involve the use of fires or heating elements. Soil removal, transport, and deposition would all occur in areas denuded of grasses, trees and underbrush and would contain suitable buffer zones from dry wildlands. These types of activities, as compared to other construction activities, typically do not pose an increased risk of wildland fire. Furthermore, water tanks and fire-fighting equipment would be onsite at all times. Therefore, no impacts would result from the project.

### 4.8 Hydrology and Water Quality

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Violate any water quality standards or waste discharge requirements? | | | ✓ | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | | ✓ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | | | ✓ | |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. | | | ✓ | |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | | | ✓ | |
| f) Otherwise substantially degrade water quality? | | | ✓ | |
| g) Place housing within a 100-year flood-hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | ✓ |
| h) Place within a 100-year flood-hazard area structures which would impede or redirect flood flows? | | | ✓ | |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | ✓ |
| j) Inundation by seiche, tsunami, or mudflow? | | | | ✓ |

### Surface Water

Sites A and B lie within the 1.4-square-mile Jacques Gulch Watershed. Site A is located on the main stem of the Jacques Gulch channel and extends upstream from the Almaden Reservoir for approximately 700 feet. Site B is located at the lower end of an ephemeral tributary to Jacques Gulch that joins the main stem channel at a point approximately 600 feet upstream of Site A. The Site B subwatershed encompasses an area of 0.29 square miles. These watersheds comprise steep, narrow canyons that drain to moderately to steeply sloping creek channels. Canyon hill slopes are typically vegetated with grasses and varying densities of woodland, primarily oak and sycamore.

### Floodplains

Mean annual rainfall in the Jacques Gulch Watershed totals approximately 34 inches (CA. Dept. of Water Resources, 1981). Aside from rare summer thunderstorms, the bulk of the rainfall in this Mediterranean climatic zone occurs during the wet season, which typically extends from November through March. When significant floodflows do occur, erosive energies are high and substantial sediment can be transported downstream to the lower end of the canyon (Site A) and Almaden Reservoir. Occasional debris flows can exacerbate such impacts. There are no structures in or near the floodplain that would be at risk. However, Jacques Gulch enters Almaden Reservoir via culvert under Alamitos Road. When the capacity of the culvert is exceeded, water will pond behind the barrier formed by the road and, in very high flows, can overtop the road and flow across to the reservoir.

### Groundwater

The steep nature of the canyons and their channels, the high degree of channel confinement, the shallow soils, and the frequent bedrock outcropping contribute to a rapid runoff production in the site watersheds. This rapid runoff and the more pronounced confinement of the tributary canyon (Site B) limits the opportunity for groundwater recharge and thus restricts groundwater inflow to the channel, outside of periods of runoff-producing rainfall and immediately thereafter. The main stem Jacques Gulch channel drains a larger watershed, and the adjoining valley floor is less confined than that of the tributary channel. Thus, the valley alluvium is thick enough to support some groundwater storage and intermittent (i.e., seasonal) flow in the main stem channel.

### Rules and Regulations

#### Federal Requirements

Endangered Species Act (ESA), Section 7 protects listed species from harm, or take. The ESA requires federal agencies to consult with the Secretary of the Interior through the USFWS and the Secretary of Commerce through the National Marine Fisheries Service (NMFS) to ensure that agency projects do not jeopardize the continued existence of endangered or threatened species or destroy or adversely modify critical habitat that supports such species.

Under the Clean Water Act (CWA) Section 303(d), the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards are required to list bodies of water as impaired when the traditional permitting processes for waste discharges have failed to maintain designated water quality objectives and standards. CWA Section 303(d) also requires preparation of a Total Maximum Daily Load (TMDL) program for waters identified by the state as impaired. CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, administered by the U.S. Environmental Protection Agency (EPA). In California, the SWRCB is authorized by the EPA to oversee the NPDES program through the Regional Water Quality Control Boards. Under CWA Section 404, the U.S. Army Corps of Engineers (USACE) and the EPA regulate the discharge of dredged and fill materials into waters of the United States. Under CWA Section 230.10(a), Section 404 and other permits may be issued only for the "least environmentally damaging" alternative. For regulatory purposes, the project area is under the jurisdiction of the USACE, San Francisco District.

Executive Order 11990 (May 24, 1977) directs all federal agencies to refrain from assisting or giving financial support to projects that encroach on public or privately owned wetlands.

State-Level Requirements

Streambed Alteration Agreements, as defined in Section 1602 of the California Fish and Game Code, protect the natural flow, bed, channel, and bank of any river, stream, or lake designated by the California Department of Fish and Game (CDFG) in which there is, at any time, an existing fish or wildlife resource, or benefit for the resource. Section 1602 requires an agreement between the CDFG and a public agency proposing a project that would:

- Divert, obstruct, or change a streambed
- Use material from the streambed
- Result in the disposal, or deposition of debris, waste, or other material containing crumbed, flaked, or ground pavement where it can flow into a stream.

The California Endangered Species Act (CESA) protects wildlife and plants listed as threatened and endangered by the California Fish and Game Commission. It is administered by CDFG.

Under the Porter-Cologne Water Quality Control Act of 1975, beneficial uses of California's major rivers and groundwater basins, along with narrative and numerical water quality objectives, are established and periodically reviewed in Water Quality Control Plans (basin plans) (California Regional Water Quality Control Board, 1995). CWA assigns the primary responsibility for protecting surface- and groundwater resources from degradation, including oversight of basin plans, to the Regional Water Quality Control Boards (RWQCB).

Local/Regional Requirements

The Santa Clara Basin Water Management Initiative's mission is to protect and enhance the watershed, and create a sustainable future for the community and the environment. The central aim of the WMI is to coordinate existing regulatory activities on a basin wide scale, rather than to establish separate regulatory actions for specific issues.

State Water Resources Control Board (SWRCB) and RWQCB for the San Francisco Bay Region establish policies and procedures that are designed to ensure the protection of surface water and groundwater from degradation. The RWQCB establishes beneficial uses of surface water and groundwater resources, along with narrative and numerical water quality objectives to protect those uses, in its Water Quality Control Plan for the San Francisco Bay Basin (California Regional Water Quality Control Board, 1995). The RWQCB administers the NPDES permitting and Section 401 water quality certification processes.

The Fisheries and Aquatic Habitat Collaborative Effort identifies factors limiting steelhead and Chinook salmon populations in the Guadalupe River, Coyote Creek, and Stevens Creek watersheds. Participants include the District; CDFG; Guadalupe-Coyote Resource Conservation District, Pacific Coast Federation of Fishermen's Associations, and Trout Unlimited, as represented by National Heritage Institute (NHI); NMFS; USFWS; and the City of San Jose.

### Discussion

**a):** Construction activities would denude significant areas prior to the establishment of a rooted ground cover. While erosion control measures (BMPs) would be employed to minimize raindrop impact and soil detachment and transport in runoff, some level of erosion in excess of background levels can be expected to occur within these areas. In addition, some minor calcine residues could be mobilized and moved downstream. The proposed sediment retention basin is intended to store coarse sediments during its brief period of service, including minor, unconsolidated calcine residues. Once the available sediment storage volume has been filled, the lower reach channel would be allowed to move toward a stable form and alignment. Due to the initial undefined nature of the developing channel, the process of stable channel formation could take a number of years. Implementation of the following BMPs would ensure that the proposed project would not violate any water quality standards or waste discharge requirements. Impacts could be adverse with these BMPs, but would be less than significant.

- WQ-4, Handle Sediments so as to Minimize Water Quality Impacts
- WQ-5, Soil Stockpiles
- WQ-9, Minimize Local Erosion Increase from In-channel Vegetation Removal
- WQ-41, Stormwater Pollution Prevention Plan

(See Appendix A for details)

**b):** The proposed project would not directly draw water from groundwater supplies. The water required, largely for dust control, would be drawn from sources within the Park, from the reservoir, or hauled to the site. Impervious surfaces seal the soil surface, eliminating the infiltration of precipitation and natural groundwater recharge. As a result, stormwater washes directly across impervious surfaces instead of infiltrating into the soil to contribute to groundwater recharge. No new impervious surfaces would be introduced during construction of the proposed project. Consequently, no impacts would occur.

**c):** Under the proposed project, the drainage channel and floodplain would be restored and returned to a natural condition and native plant materials would be re-established, creating a self-sustaining riparian habitat appropriate to site conditions and the ecology of the region. Although portions of the project area would be bare prior to the re-establishment of vegetation, the BMPs listed above, combined with the planting plan developed for the project, would minimize erosion and siltation. Any impacts would be adverse, but would be less than significant.

**d):** As described above, the drainage channel and floodplain would be designed to restore the drainage in Sites A and B to natural conditions while enhancing the flood conveyance capacity of the channel. The proposed project would enhance the drainage patterns of the project area and reduce the potential for flooding. Any impacts to the drainage pattern and runoff rate resulting from the proposed project would be less than significant.

**e):** The proposed project is designed to restore the flood capacity of the drainage channel to a state more representative of the original capacity. The only drainage system affected by the project would be the undersized culvert at Alamitos Road, which would be replaced by a larger culvert. In addition, the BMPs listed above would minimize erosion and siltation that might occur during construction of the proposed project. With the implementation of these BMPs, any impacts to existing or planned storm water drainage systems would be less than significant.

**f):** The proposed project is designed to restore and enhance the natural conditions of the project area and would improve water quality with the removal of calcine deposits from the project sites. Proposed project construction activities could potentially degrade quality, however, implementation of the BMPs listed above would reduce any impacts to water quality to less than significant levels.

**g):** The proposed project does not involve placement of housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. Therefore, there would be no impact.

**h)**: The proposed project would not place structures within a 100-year floodplain as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map that would impede or redirect flood flows. The project would replace an existing culvert with a new culvert of larger capacity. This would be a beneficial action. The culvert would be of a size approved by the County. Water flow in excess of the culvert capacity can back up and, in very high flow conditions, overtop Alamitos Road. The project would be constructed to address these conditions. The impact from installing a larger culvert would be less than significant, and no additional mitigation measures would be required.

**i)**: The proposed project is upstream of Almaden Reservoir. The project is being designed to restore the stream channel to a natural condition; however, it would not change the volume of water entering the reservoir and thus not increase the risk of failure of the reservoir's dam. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam and there would be no impact.

**j)**: The project area does not occur within a region that could be affected by inundation by seiche, tsunami, or mudflow. There would be no impact.

### *4.9 Land Use and Planning*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | | | | ✓ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | ✓ |
| c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan? | | | | ✓ |

**Discussion**

**a):** Because of the isolated nature of the project sites away from residences or other sensitive receptors associated with developed areas, project activities would not physically divide any established communities; therefore no impacts would occur.

**b):** The proposed project would be in compliance with the County General Plan designation and Special Land Use Area overlay. No impacts would occur.

**c):** The proposed project would occur in an area covered by a habitat conservation plan that is in preparation. This is the Santa Clara County Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) (HCP/NCCP). The HCP/NCCP addresses the District's and partners' activities and responsibilities under the federal Endangered Species Act (ESA) of 1973 as amended (16 USC 1531-1544). The District, in preparing this MSHCP, is requesting an incidental take statement under Section 10(a) of the ESA to conduct flood protection, water supply, and related activities within the District's operational area. The HCP/NCCP, when completed, will address projects, activities, and the process the District will use to evaluate the potential for take of covered species. The project site contains at least one species on the Interim Projects Species List: Loma Prieta hoita (Hoita strobilina CNPS List 1B) The District is required to notify Resource Agencies to request comments regarding recommended mitigation measures or project alternatives that would help achieve the conservation objectives of the pending HCP/NCCP. Conservation objectives and mitigation measures for Loma Prieta hoita will be incorporated into the project plan as they are made available. The project is also part of the Almaden Quicksilver Restoration Plan established with the USFWS and the CDFG. As this project has been designed according to the Almaden Quicksilver Restoration Plan, it would be in compliance with this plan. No impacts would occur.

### *4.10 Mineral Resources*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | ✓ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | | | | ✓ |

The project area has not been classified as a Mineral Resource Zone (MRZ) because it is located outside the urbanization lines set by the California Office of Planning and Research (CGS, 2006). The closest classified mineral resource zones are located approximately two miles north of Site B of the proposed project, and include MRZ-1, MRZ-3, and MRZ-4. MRZ-1 includes areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. MRZ-3 includes MRZ-3a, areas containing known mineral deposits that may qualify as mineral resources, and MRZ-3b, areas containing inferred mineral deposits that may qualify as mineral resources. MRZ-4 includes areas where geologic information does not rule out either the presence or absence of mineral resources (CGS, 2006).

Operations related to the mining and processing of the mercury-bearing ore cinnabar (mercury sulfide) were conducted in the Mine Hill Area, located approximately 0.5 to 1 mile north of the proposed project, from approximately 1840 to 1970 (USFWS & CDFG, 2005).

This evaluation of potential mineral resource impacts is based on the following sources of information: data collected during field reconnaissance; a review of the most current regional information published by the California Geological Survey (formerly the California Department of Mines and Geology), and the Association of Bay Area Governments (ABAG); and a review of the project description. Impacts on mineral resources also relied on information gathered from a review of pertinent literature, including local general plans and relevant EIRs.

#### Discussion

**a) and b):** The project area does not contain any known or locally important mineral resources defined by any local land use plans, including the Santa Clara County General Plan. The proposed project would involve the removal of calcine deposits, a residual material from processing mercury-bearing ore cinnabar (mercury sulfide), but would not render any known mineral resource inaccessible to extraction. Therefore the proposed project would have no impacts to a known mineral resource.

## *4.11 Noise*

Would the project result in:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? | | | | ✓ |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | | | ✓ | |
| c) Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | | ✓ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | ✓ | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | ✓ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | ✓ |

### Noise Environment in the Project Area

Noise levels in the project area depend on the proximity of occupied and developed uses. The proposed project site would occur in Almaden Quicksilver County Park, which is open space that provides low ambient noise levels.

### Noise Sensitive Areas

Noise sensitive receptors are residences, schools, religious facilities, hospitals, and parks. The open space of the Almaden Quicksilver County Park is considered to be noise sensitive as it is used for recreation. The nearest residential properties are approximately 0.25 miles south of Site A, along the extension of Alamitos Road past the Hicks Road intersection. The proposed transportation route for removal of the calcine deposits would not pass adjacent to these residences.

### Ordinances and Regulations

The following summarizes the local requirements.

Santa Clara County General Plan

The objectives for controlling community noise outlined in the General Plan include maintaining noise below 55 Ldn at parks and open space reserves and at residences. This level is established in the General Plan's Noise Compatibility Standards for Land Use. The policy for construction noise is to implement suitable mitigation measures on a project-by-project basis.

Santa Clara County Code

Santa Clara County Code Section B11-154(a) prohibits nuisance noise if it is annoying or disturbing. Construction noise that may create a disturbance across residential or commercial property lines must not occur during nighttime hours (7 p.m. to 7 a.m.) or on Sundays or holidays [Section B11-154(b)(6)], and the County Code also specifies that where technically and economically feasible, construction activities shall not exceed maximum daytime levels of 75 dBA at single-family residences. More stringent levels (of 60 dBA) should be achieved by construction activities that extend over long terms construction.

### Discussion

**a):** Project activities would involve short-term use of trucks, excavators, bulldozers, graders, compactors, and other equipment for the removal of calcine, land grading, contouring, restoration of slopes, and repairing stream banks and culverts. This equipment would not be used near the nearest residences; it would be used within the open space of the County Park. Up to six months of noise would be generated by this equipment and by traffic accessing the project site, and the Mine Hill consolidation area and along the Hicks/Wood route to Mine Hill. Noise levels for typical pieces of equipment (at 50 feet) that would be used for the project are listed in Table 4.11-1.

**Table 4.11-1. Typical Noise Levels for Construction Equipment**

| Equipment | Typical Noise Levels (dBA, at 50 feet) | Equipment | Typical Noise Levels (dBA, at 50 feet) |
|---|---|---|---|
| Front loaders | 85 | Compactors | 82 |
| Backhoes, excavators | 80-85 | Pumps | 76 |
| Tractors, dozers | 83-89 | Generators | 81 |
| Graders, scrapers | 85-89 | Compressors | 83 |
| Trucks | 88 | Concrete pumps, mixers | 82-85 |
| Jack hammers, rock drills | 98 | | |

Sources: Adapted from U.S. EPA, 1972 / U.S DOT, 1995.

The project activities would create both intermittent and continuous noises. Intermittent noise would result from periodic, short-term equipment operation, and more continuous noise would result from equipment running over longer periods, such as generators. The maximum intermittent equipment noise levels would range from 85 to 92 dBA at 50 feet for pieces of equipment operating simultaneously, with peaks up to 98 dBA for rock drilling. Continuous equipment noise levels would be lower because most equipment would not be operated steadily. Because sound fades over distance, these levels would diminish before reaching residences, and would be reduced further by intervening terrain. Noise would occur off site from commuting workers and from trucks needed to bring equipment and materials to the project site. The peak noise levels associated with passing trucks and commuting worker vehicles would be approximately 70 to 75 dBA at 50 feet.

The project would not expose residents to noise levels in excess of County of Santa Clara noise lever standards for construction/demolition as identified in the County's Noise Ordinance. No permanent increase in ambient noise levels would occur as a result of the proposed project.

**b):** Vibration from construction activities and heavy equipment might be perceptible in the immediate vicinity of the activities. The level of groundborne vibration that could reach sensitive receptors depends on the distance to the receptor, what equipment is used, and the soil conditions surrounding the construction site. Because all proposed activities would be sufficiently distant from any occupied structure, this impact would be less than significant.

**c):** Following completion of the proposed project, the site would be restored and no change in ambient noise would occur. Therefore, there would be no impact.

**d):** As described above, project activities would create continuous noises resulting from equipment running over longer periods, such as generators. Continuous equipment noise levels would be lower than intermittent noise levels because most equipment would not be operated steadily. Because sound fades over distance, these levels would diminish before reaching residences, and it would be reduced further by intervening terrain.

Implementation of the following BMPs, would minimize the likelihood of construction noise causing complaints or disruptions to residences or users of the open space. Construction activities that would occur during the daytime with implementation of the BMP would not cause substantially increase ambient noise levels in the project vicinity; therefore, this impact would be less than significant.

- NO-1, Noise Pollution
- NO-2, Residential Noise Management

*(See Appendix A for details)*

**e) and f):** The proposed project would not be located within two miles of a public airport or within an airport land use plan nor within the vicinity of any private airstrip. No feature of the project would expose people in the project area to excessive noise from aircraft. No impacts would occur.

### 4.12 Population and Housing

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | ✓ |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | ✓ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | ✓ |

**Discussion**

**a) – c):** The proposed project would not induce population growth, displace existing housing, or displace people. It would add no new housing or jobs, nor remove any housing.

### *4.13 Public Services*

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Fire protection? | | | | ✓ |
| b) Police protection? | | | | ✓ |
| c) Schools? | | | | ✓ |
| d) Parks? | | | | ✓ |
| e) Other public facilities? | | | | ✓ |

**Discussion**

**a) – e):** The proposed project would not impact public services. The project would not require new or physically altered governmental or public facilities.

## *4.14 Recreation*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | ✓ |
| b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | ✓ |
| c) Would the project result in permanent and/or temporary impacts, such as possible disruption of recreational activities, affecting the recreational value of existing facilities? | | | ✓ | |

### Discussion

**a) – b):** As the proposed project sites are on Park land, construction activities associated with the project have the potential to affect recreational areas and facilities. Noise, dust, and traffic associated with the proposed project would temporarily reduce the quality of the recreational experience. Neither of the project sites, however, have Park facilities located in them nor are they crossed by trails or footpaths. As the proposed project is a part of the Almaden Quicksilver Restoration Plan, however, the proposed project would ultimately improve the physical condition of the recreational area. The project does not include or require the construction or expansion of any recreational facilities.

**c):** As the proposed project sites are on Park land, construction activities associated with the project have the potential to disrupt public access and recreational activities. Noise, dust, and traffic associated with the proposed project would reduce the quality of the recreational experience and could potentially temporarily restrict access to some Park facilities. Neither of the project sites, however, have Park facilities located in them nor are they crossed by trails or footpaths. Activities at the project sites could restrict traffic access to and from Almaden Reservoir during culvert replacement, but traffic flow is low at this location and any restrictions would be short-term and temporary. The Wood Road transportation route for removal of calcine was selected specifically to avoid the use of Mine Hill Road. An alternative route would be via Mine Hill Road. However, the County identified Mine Hill Road as a popular hiking, biking, and equestrian route. Curves in the road would result in safety hazards for uses if trucks were also on the road. As a consequence, the road would have to be closed to users. By using the Wood Road transportation route, public access restrictions would be minimized. While project activities may temporarily disrupt recreation or restrict public access, the project would not substantially affect the recreational value of the existing facilities. Consequently, impacts could be adverse, but would be less than significant.

### *4.15 Transportation/Traffic*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (for example, result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | | | ✓ | |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | | | ✓ | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks? | | | | ✓ |
| d) Substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment)? | | | | ✓ |
| e) Result in inadequate emergency access? | | ✓ | | |
| f) Result in inadequate parking capacity? | | | ✓ | |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (for example, bus turnouts, bicycle racks? | | | | ✓ |

**Affected Roads**

The project would involve work in unincorporated Santa Clara County within the Almaden Quicksilver County Park. The project site is located along Hicks Road, Alamitos Road, and away from the existing roadway network within the park. Hicks and Alamitos Roads are rural paved two-lane roads that only provide access to remote properties, and traffic volumes on these road are low. Wood Road, which would be used to access the Mine Hill consolidation area, is an unpaved single-lane road within the park designated for pedestrian, equestrian, horse-cart, and bicycle use.

**Regional Access**

Regional access to the project area is provided by U.S. Highway 101, State Route 85 (SR 85), and State Route 17 (SR 17); each pass within approximately five to eight miles of the project site. Alamitos Road may be reached from Highway 101 or SR 85 by traveling along streets in the southern portion of the City of San Jose to Almaden Road and the community of New Almaden. The primary access is via either SR 85 and Almaden Expressway or McKean Road, which connects to Highway 101 east of the project site. Alternate access can also be provided by SR 17 through Los Gatos. Urban streets in the jurisdiction of the Town of Los Gatos lead from SR 17 to Shannon Road, which can be used to access the rural Hicks Road, or Camden Avenue in the City of San Jose may also be used to access Hicks Road from SR 85.

### Transit and Rail Service

The Santa Clara Valley Transportation Authority (VTA) operates bus and light rail transit routes throughout the county. Bus lines occur along Camden Avenue between the intersection of Hicks Road and SR 85, along the Almaden Expressway, and in the Los Gatos town center. The nearest rail facility is the VTA light rail Almaden Station about four miles north of the project site. The VTA does not provide direct transit service to any location within the Almaden Quicksilver County Park.

### Pedestrian, Bicycle, and Equestrian Facilities

The Almaden Quicksilver County Park provides a variety of trails and roads that provide open space access to pedestrian, equestrian, horse-cart, and bicycle users. Wood Road is an unpaved single-lane road within the park designated for pedestrian, equestrian, horse-cart, and bicycle use. Nearby Mine Hill Road is a multiuse hiking, equestrian, and bicycle route for recreational users that would not be affected by the proposed project.

### Regulations, Plans, and Standards

California Department of Transportation
The District or its contractor would need to apply for and obtain a California Department of Transportation (Caltrans) Permit if project activities require movement of oversized or excessive load vehicles on State roadways such as Highway 101, SR 85, or SR 17. This permit would determine a specific route for the shipper to follow from origin to destination.

Santa Clara County Roads and Airports Department
Operation and maintenance of local roads in the project area is the responsibility of the Santa Clara County Roads and Airports Department. Santa Clara County transportation policies and standards for roadways are discussed in the General Plan. The proposed road and culvert repairs associated with the proposed project would need to comply with specific guidelines for the construction of public road improvements, including design standards addressing slopes, widths, and other features. Because the proposed project would involve work in and along two county roads (i.e., Hicks Road and Alamitos Road), it would be necessary for the District or its construction contractor to obtain encroachment permits from the Santa Clara County Roads and Airports Department.

Santa Clara County Department of Parks and Recreation
The Santa Clara County Department of Parks and Recreation operates and maintains the roads within Almaden Quicksilver County Park, such as Wood Road. Consistent with Use and Management Guidelines for the Santa Clara County trails and parks system, written authorization and a bond to protect against damage of the park facilities would likely need to be secured by the District prior to commencing project activities or using park trails.

### Discussion

**a):** Project activities would increase traffic on Hicks Road, Alamitos Road, and the unpaved single-lane Wood Road within the park. Traffic would arrive on Hicks and Alamitos Roads after traveling through the community of New Almaden and along the more urban city streets and highways that provide regional access, described above. Delivery of heavy equipment and construction employee traffic would occur on these roads and potentially increase traffic congestion during up to six months of project activities. Trucks for hauling water for dust control and construction materials would also access the site daily.

Local roadways in the project area have relatively low traffic volumes. Project related traffic would not increase traffic on the local roads to a level that is substantial in relation to the existing traffic load and capacity of the street system. Therefore, congestion caused by construction vehicles accessing the work areas from local roads would be minimal and limited to the short-term duration of the project work.

Installation of the new culvert in Alamitos Road would require lane closures, and work along Hicks Road would also occur within the public right-of-way (ROW). This would reduce the traffic capacity of these roads. Accordingly, traffic control measures would be implemented by the District or its contractor. The culvert would be installed in two phases on either side of the centerline of the existing road. This would require partial closure of the road with traffic being allowed to use only one lane of the road while culvert construction occurs in the opposite lane. To manage traffic on the narrowed road, stop signs would be used for each direction of traffic on the single lane. The single lane road would measure not less than 14 feet in width, and K-rails would be installed on each side of the temporary single lane road. After installation of the culvert, the road would be reconstructed, and the K-rails would be removed to restore two lanes of traffic. This construction would temporarily reduce the capacity of Alamitos Road, however because the road is lightly traveled and BMPs for traffic control would be implemented, the capacity of the road would not be substantially decreased.

The culvert and restored embankment and roadway would be designed to meet the standards of the Santa Clara County Roads and Airports Department. Full closure of Hicks or Alamitos Roads would not be necessary except perhaps very briefly during the movement of large equipment into or out of the work areas. Therefore, the project improvements would not involve design features that could increase transportation hazards on the public roads.

Coordination with the Santa Clara County Department of Parks and Recreation and the Roads and Airports Department and implementation of the following BMP, would reduce impacts to less than significant levels.

- TR-1, Implement Public Safety Measures

(See Appendix A for details)

**b):** As described above, existing traffic levels for local roadways in the project area have low traffic volumes and operate at acceptable levels of service. Therefore, impacts would be less than significant and no mitigation is required.

**c):** No operating airports or heliports are located within two miles of the proposed project. Helicopters would not be used during project construction. Therefore, the proposed project would not include any features that would disrupt or affect air traffic. As such, there would be no impacts to *air traffic patterns.*

**d):** The project would not involve any transportation-related design hazards or incompatible uses. Therefore, the proposed project would not increase hazards on area roadways due to a design feature or incompatible uses.

**e):** Project-related activities within and adjacent to public road ROW and increased truck and vehicle traffic along project access routes could temporarily increase response times for emergency response providers along affected roadways. This impact could occur on the public roads, but only very briefly during the movement of large equipment in the ROW. On Wood Road within the park, truck traffic would fully occupy this single lane road during trips to Mine Hill. To the extent this road is used for emergency services, the presence of haul trucks on this road could temporarily disrupt response to wildfires or other emergencies within the park. Mitigation Measure Tra-1 would reduce this impact to a less than significant level.

**Tra-1** **Coordination with the Santa Clara County Department of Parks and Recreation.** Prior to project implementation, coordination with the Department of Parks and Recreation is needed to ensure that an emergency response procedure is in place to allow appropriate access to Wood Road as needed by the Department of Parks and Recreation or emergency service providers.

**f):** Transport of calcine to the Mine Hill site would involve heavy use of Wood Road at the Hicks/Wood Road entry to the park. The parking area there could be affected by turning movements, idling, or temporary parking of project related trucks or equipment at the entrance to the park. The proposed project would largely involve weekday activity when the park entry would be lightly used. Project activities would not normally occur on weekends when parking capacity would be needed most. This would be a less than significant impact confined to the limited duration of project activities.

**g):** The Wood Road transportation route for removal of calcine was selected specifically to avoid the use of Mine Hill Road. An alternate route would be via Mine Hill Road. However, the County identified Mine Hill Road as a popular hiking, biking, and equestrian route. Curves in the road would result in safety hazards for uses if trucks were also on the road. As a consequence, the road would have to be closed to users. By using the Wood Road transportation route, impacts to alternative transportation would be minimized. Consequently, the proposed project would not conflict with adopted policies, plans, or programs that support alternative transportation in the project area.

## *4.16 Utilities and Service Systems*

Would the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | ✓ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction or which could cause significant environmental effects? | | | | ✓ |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | ✓ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | ✓ |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | ✓ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | ✓ |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | | ✓ |

### Discussion

**a) – c):** The project would not result in discharge of wastewater, require construction or expansion of new or existing wastewater facilities, or require new or expanded storm water drainage facilities. No impacts would occur as a result of the project.

**d):** The project would rely on naturally occurring sources of water including precipitation, shallow groundwater, and local flooding events to support the proposed wetland. The project would not result in impacts to water supplies.

**e) – g):** The project would not increase demand on wastewater treatment providers, require use of landfill for solid waste needs and complies with regulations related to solid waste.

### 4.17 Mandatory Findings of Significance

Does the project:

| | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | | ✓ | |
| b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.) | | | ✓ | |
| c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | | ✓ | |

**Discussion**

**a):** As described in Section 4.4, Biological Resources, and in Section 4.5, Cultural Resources, the proposed project has the potential to affect fish and wildlife species as well as a sensitive plant species, and also has the potential to affect undetected historical and archaeological resources. The project as designed, and with the implementation of BMPs and the mitigation measures recommended in the above sections, has a low potential to substantially affect or eliminate species, populations, plant or animal communities, or examples of California history or prehistory. The proposed project could result in impacts that would be adverse, but would be less than significant.

**b):** As the proposed project is a part of the Almaden Quicksilver Restoration Plan, the project is designed to restore the project area to natural conditions and enhance the character of the project sites. Impacts associated with the project would be a result of construction and restoration activities. While other restoration projects are being developed in the area, it is not anticipated that the construction and restoration activities associated with the proposed project would combine with the other planned restoration projects to result in cumulatively considerable impacts. As these other projects would be designed to restore the natural character of the area, the long-term effects of these projects in combination with each other would be beneficial. Although cumulative construction impacts could be adverse, they would be less than significant.

**c):** Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated, and this Initial Study concludes that all of these potential impacts are less than significant with mitigation and/or implementation of BMPs. Therefore, the proposed project does not involve any activities, either during construction or operation, which would cause significant adverse effects on human beings.

# Section 5 Report Preparation

This section lists those individuals who contributed to the preparation of this IS.

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## 5.2 Agencies or Persons Contacted

The following agencies or persons were contacted during the preparation of this document.

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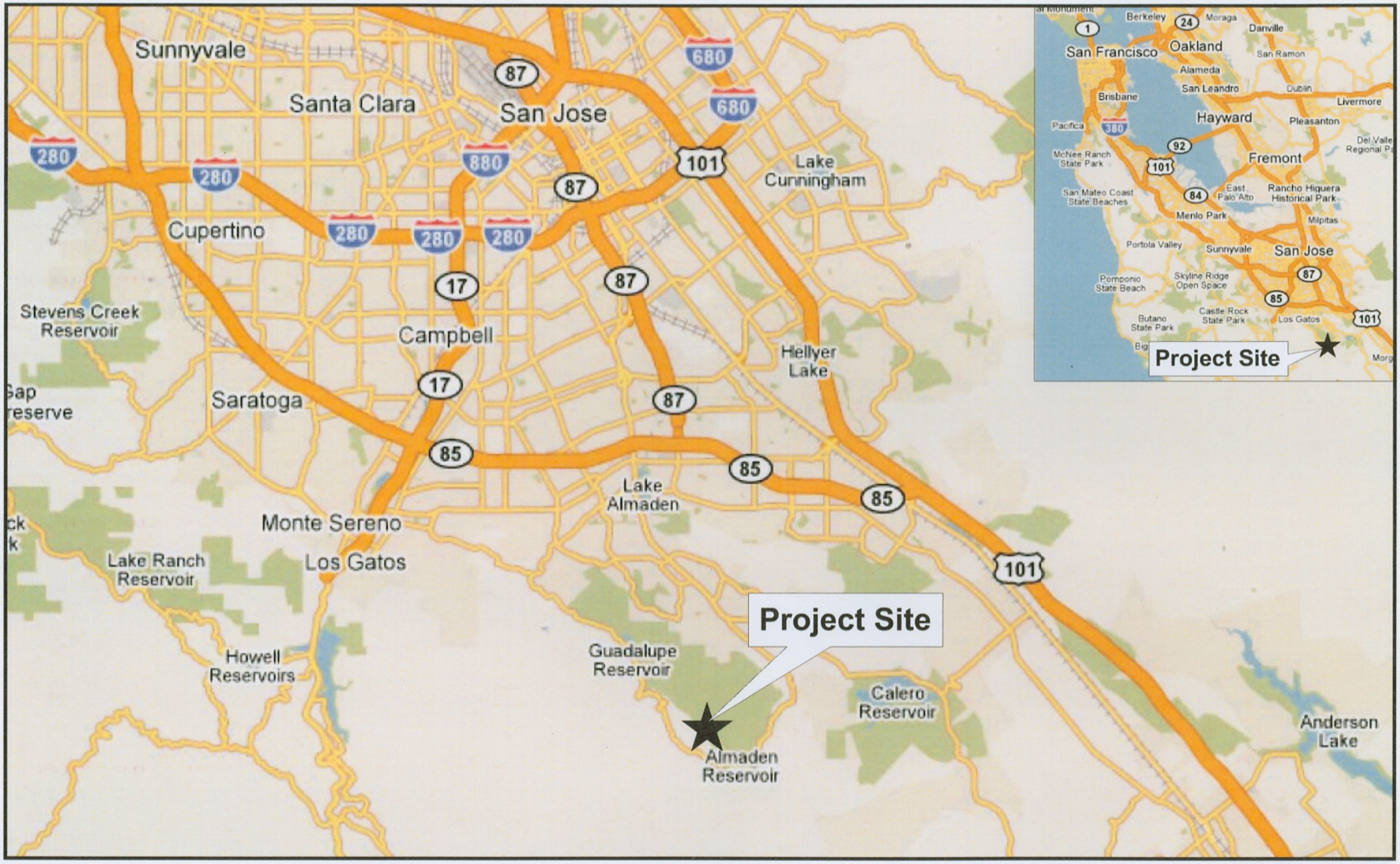
# FIGURES

Figure 1-1 Regional Location
Figure 1-2 Sites A and B Project Limits
Figure 1-3 Project Vicinity and Key Features
Figure 1-4 Project Sites, Haul Route, and Consolidation Area
Figure 1-5 Proposed Project Elements
Figure 1-6 Site B Temporary Access, Options 1 and 2



Source: Google Maps, 2006.

**Figure 1-1**
**Regional Location**

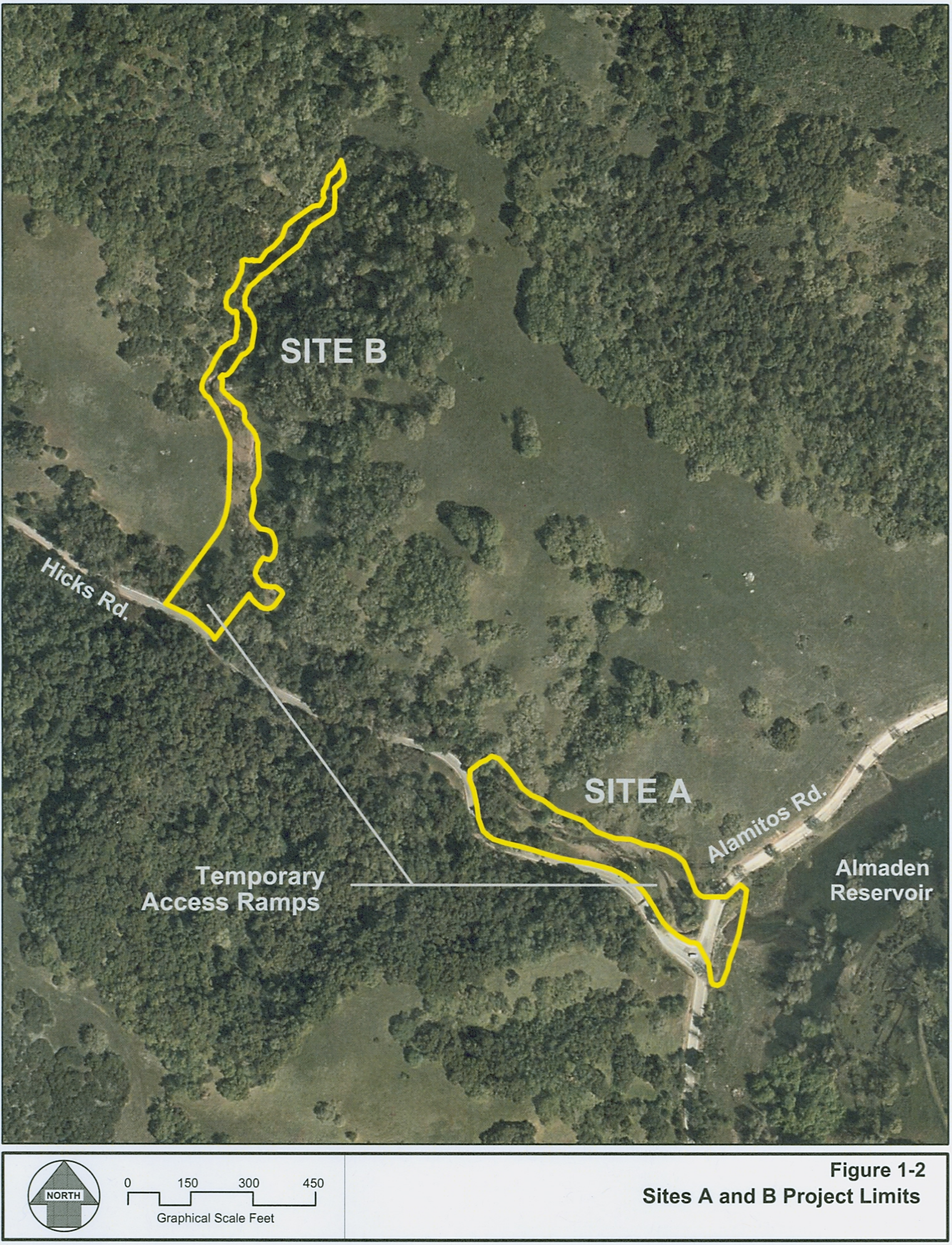
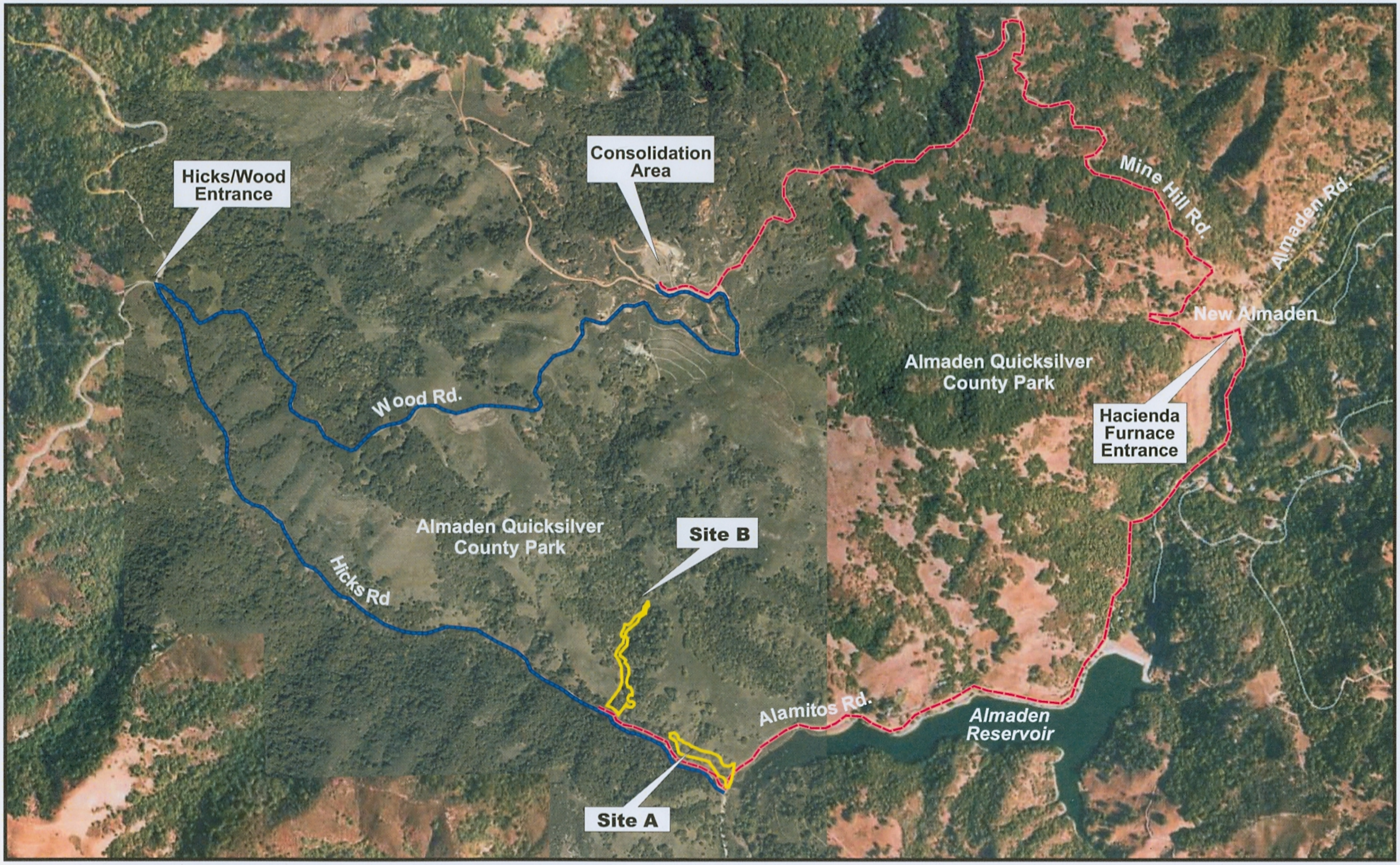
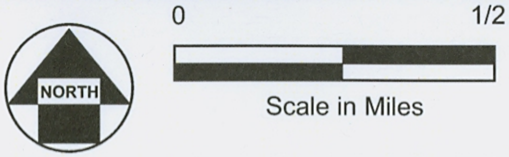


Figure 1-2
Sites A and B Project Limits

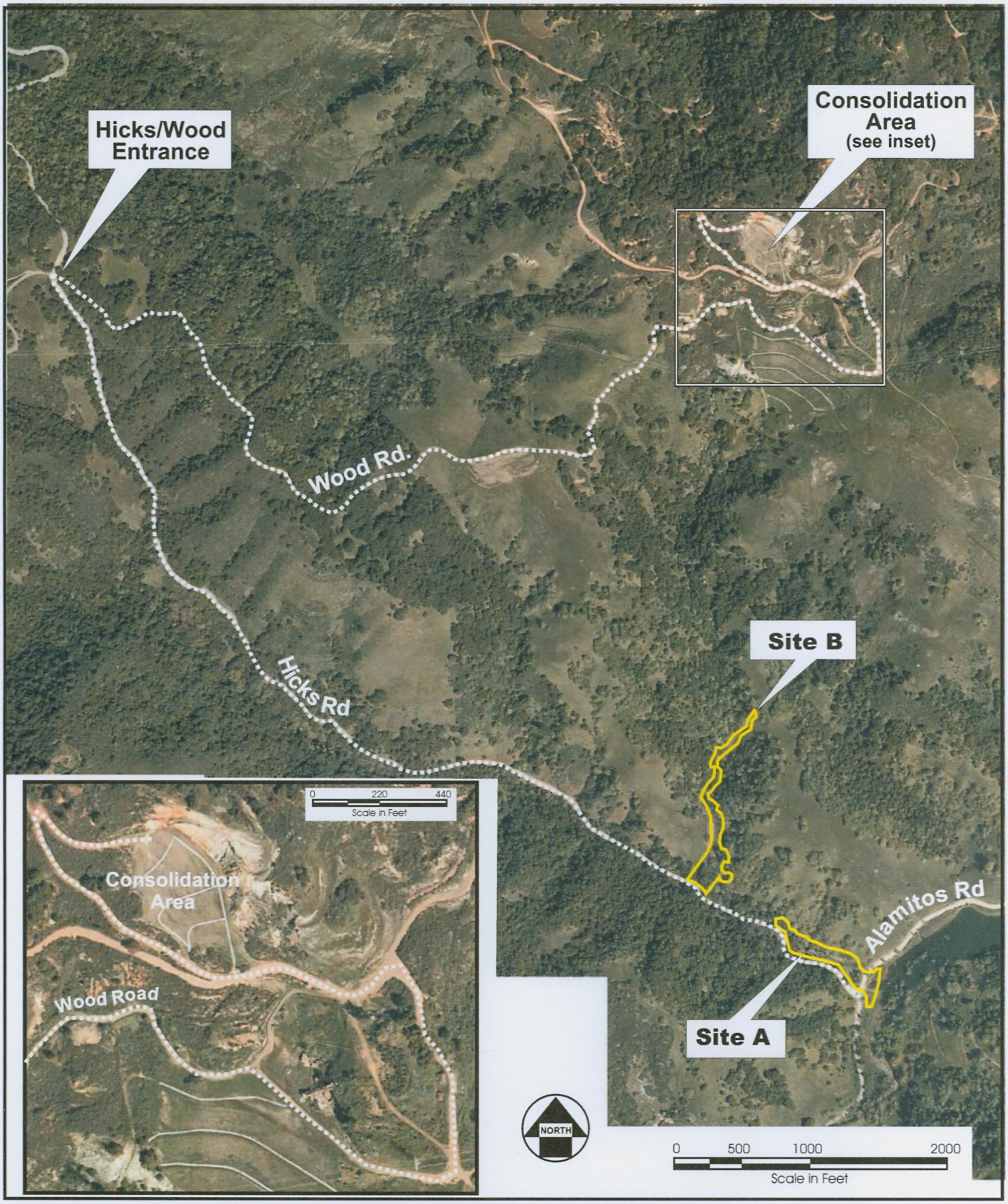




Source: Google Earth Pro, 2006.

| | |
|---|---|
| ▬ | Hicks Rd./Wood Rd. Haul Route Alternative (Preferred) |
| - - - | Alamitos Rd./Mine Hill Rd. Haul Route Alternative |

**Figure 1-3**
**Project Vicinity and Key Features**



Source: Google Earth, 2006

**Figure 1-4**
**Project Sites, Haul Route, and Consolidation Area**

Figure 1-5

Proposed Project Elements

## ABBREVIATIONS

| | |
|---|---|
| ALT | – ALTERNATE (– ALTERNATED) |
| AB | – AGGREGATE BASE |
| AC | – ASPHALT CONCRETE |
| ACI | – AMERICAN CONCRETE INSTITUTE |
| ALIGN | – ALIGNMENT (– ALIGN) |
| AMP | – AMPERE |
| APPROX | – APPROXIMATE (– APPROXIMATELY) |
| AVRD | – AVERAGE |
| ABUT | – ABUTMENT |
| ASSY | – ASSEMBLY |
| ACP | – ASBESTOS CEMENT PIPE |
| ASPH | – ASPHALT |
| AP | – ACCESS POINT |
| BP | – BEGIN POINT |
| BC | – BEGIN CURVE |
| BF | – BOTH FACES |
| BKFL | – BANKFULL |
| BM | – BENCH MARK |
| BRNG | – BEARING |
| BR | – BRIDGE |
| BW | – BARBED WIRE |
| BK | – BANK |
| BLDG | – BUILDING |
| BIT | – BITUMINOUS |
| BOT | – BOTTOM |
| BV | – BLACK VINYL |
| C | – CURVE, – CHORD |
| CB | – CATCH BASIN |
| CCM | – CELLULAR CONCRETE MAT |
| CCP | – CONCRETE – CYLINDER PIPE |
| CF | – CUBIC FEET |
| CFM | – CUBIC FEET PER MINUTE |
| CFS | – CUBIC FEET PER SECOND |
| CIP | – CAST IRON PIPE |
| CJ | – CONSTRUCTION JOINT |
| CLR | – CLEAR (– CLEARANCE) |
| CL–6 | – CHAIN LINK FENCE (NUMBER = HEIGHT) |
| CM | – CENTIMETER |
| CMP | – CORRUGATED METAL PIPE |
| CONC | – CONCRETE |
| CONST | – CONSTRUCT (CONSTRUCTION) |
| CONT | – CONTINUOUS (– CONTROL) |
| CY | – CUBIC YARDS |
| CYL | – CYLINDER |
| COL | – COLUMN |
| CRK | – CREEK |
| CSJ | – CITY OF SAN JOSE |
| DEG (°) | – DEGREES |
| DI | – DROP INLET |
| DIA | – DIAMETER |
| DIP | – DUCTILE IRON PIPE |
| DR | – DRIVE |
| D/S | – DOWNSTREAM |
| DBL | – DOUBLE |
| DWG | – DRAWING (– DRAWINGS) |
| DWN | – DOWN |
| DET | – DETAIL |
| E | – EAST, ELECTRIC |
| (E) | – EXISTING |
| EJ | – EXPANSION JOINT |
| EA | – EACH |
| EB | – ELECTRICAL BOX |
| EC | – END CURVE |
| EL | – ELEVATION |
| ELECT | – ELECTRIC (ELECTRICAL) |
| ELEV | – ELEVATION |
| EM | – ELECTRIC METER |
| ENGR | – ENGINEER (ENGINEERING) |
| EP | – EDGE OF PAVEMENT |
| EXIST | – EXISTING |
| EXPWY | – EXPRESSWAY |
| E'LY | – EASTERLY |
| RWU | – EQUATION |
| FD | – FOUND |
| FF | – FAR – FACE |
| FG | – FINISH GRADE |
| FH | – FIRE HYDRANT |
| FT (') | – FEET (– FOOT) |
| FTG | – FOOTING |
| FWY | – FREEWAY |
| FB | – FREEBOARD |
| G | – GAS |
| GA | – GAUGE (GAGE) |
| GAL | – GALVANIZE (GALVANIZED) |
| GB | – GUY ANCHOR AND POLE |
| GB | – GRADE BREAK |
| GFI | – GROUND FAULT INTERRUPTER |
| GL | – GRADING LIMIT |
| GM | – GAS METER |
| GPM | – GALLONS PER MINUTE |
| GPS | – GALLONS PER SECOND |
| GR | – GRADE |
| GRND | – GROUND |
| GRP | – GROUP |
| GP | – GUY POLE |
| H | – HEIGHT |
| H&T | – HUB AND TACK |
| HORIZ | – HORIZONTAL |
| HP | – HORSEPOWER, HINGEPOINT |
| HWY | – HIGHWAY |
| HK | – HOOK (APPLIED TO REBAR) |
| I | – IRRIGATION |
| ID | – INSIDE DIAMETER (DIMENSION) |
| IF | – INSIDE FACE |
| IN (") | – INCH (INCHES) |
| INV | – INVERT |
| IP | – IRON PIPE |
| JP | – JOINT POLE |
| JT | – JOINT |
| JUNCT | – JUNCTION |
| K | – KILO |
| Km | – KILOMETER |
| KV | – KILOVOLT |
| Kw | – KILOWATT |
| LB | – LEFT BANK |
| LF | – LINEAR FEET |
| L | – LENGTH (LONG) |
| LN | – LANE |
| LT | – LEFT |
| LP | – LIP OF GUTTER |
| m | – METER |
| MAINT | – MAINTENANCE |
| MAX | – MAXIMUM |
| MFP | – MODIFIED FLOOD PLAIN |
| MH | – MANHOLE |
| MIN | – MINIMUM |
| MON | – MONUMENT |
| MATL | – MATERIAL(S) |
| MEMB | – MEMBER |
| MTL | – METAL |
| NGVD | – NATIONAL GEODETIC VERTICAL DATUM |
| N | – NORTH |
| (N) | – NEW |
| N/A | – NOT APPLICABLE,NOT AVAILABLE |
| NE | – NORTHEAST |
| NE'LY | – NORTHEASTERLY |
| NF | – NEAR FACE |
| NIC | – NOT IN CONTRACT |
| NPDES | – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM |
| NTS | – NOT TO SCALE |
| NW | – NORTHWEST |
| NW'LY | – NORTHWESTERLY |
| N'LY | – NORTHERLY |
| OC | – ON CENTER |
| OD | – OUTSIDE DIAMETER (DIMENSION) |
| OF | – OUTSIDE FACE |
| OH | – OVERHEAD |
| OPNG | – OPENING |
| PL | – PROPERTY LINE |
| PB | – PULL BOX |
| PCC | – PORTLAND CEMENT CONCRETE<br>COMPOUND CURVE |
| PI | – POINT OF INTERSECTION |
| POB | – POINT OF BEGINING |
| POT | – POINT OF TANGENT |
| PP | – POWER POLE |
| PRC | – POINT OF REVERSE CURVE |
| PSI | – POUNDS PER SQUARE INCH |
| PT | – POINT |
| PVC | – POLYVINYL CHLORIDE (PIPE) |
| PVMT | – PAVEMENT |
| PED | – PEDESTRIAN |
| Q | – DESIGN DISCHARGE (CFS) |
| R | – RADIUS |
| RB | – RIGHT BANK |
| RC | – REINFORCED CONCRETE |
| RCB | – REINFORCED CONCRETE BOX |
| RCP | – REINFORCED CONCRETE PIPE |
| RD | – ROAD |
| RCP | – REINFORCING STEEL BAR |
| REINF | – REINFORCEMENT (REINFORCING) |
| REQ'D | – REQUIRED |
| RP | – RADIUS POINT |
| RT | – RIGHT |
| RTE | – ROUTE |
| RR | – RAILROAD |
| R/W | – RIGHT OF WAY |
| REF | – REFERENCE (REFER) |
| S | – SOUTH, SLOPE |
| SCRR | – SACK CONCRETE RIP–RAP |
| SCSP | – SACKED CONCRETE SLOPE PROTECTION |
| SCH | – SCHEDULE |
| SCVWD | – SANTA CLARA VALLEY WATER DISTRICT |
| SD | – STORM DRAIN, STANDARD DETAIL |
| SE | – SOUTHEAST |
| SEC (") | – SECONDS |
| SECT | – SECTION |
| SE'LY | – SOUTHEASTERLY |
| SHT | – SHEET |
| SPECS | – SPECIFICATIONS |
| SQ FT | – SQUARE FEET |
| SS | – SANITARY SEWER |
| SSCO | – SANITARY SEWER CLEANOUT |
| STA | – STATION |
| STD | – STANDARD |
| STL | – STEEL |
| STR | – STRUCTURE |
| SW'LY | – SOUTHWESTERLY |
| SY | – SQUARE YARDS |
| SYM | – SYMMETRICAL |
| SW | – SOUTHWEST |
| S'LY | – SOUTHERLY |
| T | – TANGENT |
| TEL | – TELEPHONE |
| TBM | – TEMPORARY BENCH MARK |
| TC | – TOP OF CURB |
| TCA | – TEMPORARY CONSTRUCTION AREA |
| TFC | – TRAFFIC |
| THK | – THICK |
| TOB | – TOP OF BANK |
| TOC | – TOE OF CHANNEL |
| TP | – TELEPHONE POLE, TURNING POINT |
| TP–1 | – TEST PIT (NUMBER=DESIGNATION/LOCATION |
| TS | – TRAFFIC SIGNAL |
| TV | – TELEVISION (CABLE OR FACILITY) |
| TW | – TOP OF WALL |
| TYP | – TYPICAL |
| UB | – UTILITY BOX |
| UC | – UTILITY CONDUIT |
| UG | – UNDERGROUND |
| U/S | – UPSTREAM |
| USC&GS | – UNITED STATES COASTAL AND GEODETIC SURVEY |
| V | – VOLTS |
| VCP | – VITRIFIED CLAY PIPE |
| VERT | – VERTICAL |
| W | – WITH, WATER, WEST, WIDTH, (WIDE) |
| W/O | – WITHOUT |
| WM | – WATER METER |
| WS | – WATER SURFACE |
| WT | – WEIGHT |
| WD | – WOOD (WOODEN) |
| WSP | – WATER SURFACE PROFILE |
| WV | – WATER VALVE |
| WW | – WING WALL |
| WWF | – WELDED WIRE FABRIC |
| W'LY | – WESTERLY |
| X–SECT | – CROSS SECTION |
| Y | – YARDS |
| Z | – ZONE |

## LEGEND

| | |
|---|---|
| | EXIST BARBED WIRE FENCE |
| | EXIST CHAIN LINK FENCE |
| | EXIST WOODEN FENCE |
| | SNOW FENCE |
| | CENTER LINE OR CONTROL LINE |
| | HAUL ROUTE |
| | RW LINE |
| | RW TCE |
| | RW UTILITY EASEMENT |
| | PROPERTY LINE |
| | EXIST RETAINING WALL |
| | EXIST EDGE OF AC ROAD |
| | EXIST BACK OF SIDEWALK |
| | EXIST TOP FACE OF CURB |
| | EXIST BRIDGE HEADWALL |
| | EXIST RAILROAD TRACK |
| | EXIST OVERHEAD ELECT/TEL/CTV |
| | EXIST SANITARY SEWER |
| | EXIST STORM DRAIN |
| | EXIST WATER LINE |
| | EXIST GAS LINE |
| | EXIST OVERHEAD TELEPHONE LINE |
| | EXIST OVERHEAD ELECTRIC LINE |
| | EXIST ELECTRIC LINE |
| | EXIST STEP GABIONS |
| | EXIST GEO MAT |
| | EXIST SACKED CONCRETE |
| | EXIST RIP RAP |
| | EXIST CONC SLAB |
| | EXIST STRUCTURE PLAN OUTLINE |
| | EXIST GRAVEL |
| | EXIST AC PAVEMENT |
| ▨ | ITEMS TO BE REMOVED |

| | |
|---|---|
| | PROPOSED SLOPE OF BANK |
| | EXISTING SLOPE OF BANK |
| 4 / 10 | 4 INDICATES DETAIL NUMBER<br>10 INDICATES SHEET NUMBER ON WHICH DETAIL APPEARS |
| A / 10 | A INDICATES SECTION<br>10 INDICATES SHEET NUMBER ON WHICH SECTION APPEARS |
| | POWER POLE (PP)<br>JOINT POLE (JP)<br>TELEPHONE POLE (TP)<br>CABLE TV POLE (CP)<br>TOWER<br>AS DESIGNATED |
| | ELECTROLIER |
| | FIRE HYDRANT |
| | GUY ANCHOR<br>UTILITIES BOXES<br>(AS ABBREVIATED) |
| WM | EXIST WATER METER |
| GM | EXIST GAS METER |
| | EXIST ELECT METER |
| T | EXIST TELEPHONE EQUIPMENT |
| | EXIST WATER VALVE |
| | EXIST STORM DRAIN DROP INLET |
| SD | EXIST STORM DRAIN MANHOLE |
| MW | EXIST MONITORING WELL |
| △ | CURVE, CENTRAL ANGLE |
| | SURVEY MONUMENT OR HORIZONTAL CONTROL POINT |
| ⊠ | BENCH MARK |
| | PANEL POINT (AERIAL) |
| ▽ | WATER SURFACE (PROFILE) |
| ⊗ 3 | DRILLED SOIL TEST SAMPLE } NUMBER = TEST LOG NUMBER |
| ⊕ 5 | SURFACE SOIL TEST SAMPLE } NUMBER = TEST LOG NUMBER |
| ← ER | EXIST. RAMP |
| S=0.0016 → | SLOPE (FEET/100') |
| | ANGLE |

| | |
|---|---|
| ← AP | ACCESS POINT FROM PUBLIC STREET, HIGHWAY OR FREEWAY |
| ℄ | CONTROL LINE OR CENTER LINE |
| FL | FLOW LINE |
| PL | PROPERTY LINE |
| Ø | DIAMETER |
| & | AND |
| @ | AT |
| % | PERCENT |
| # | NUMBER |
| 125 | NUMERICAL POINT DESIGNATION |
| ◎ | MONUMENT SET AS NOTED |
| ○ | I.P. SET |
| ● | FOUND IRON PIPE AS NOTED |
| ◉ | FOUND ST'D. CITY MONUMENT |
| C5 T5 | CURVE OR TANGENT IDENTIFICATION NUMBER |
| TP–1 | TEST PIT (NR. = LOCATION/DESIGNATION) |
| | EXISTING CHANNEL |
| 2+00 | SURVEY BASELINE |
| 2+00 | CONSTRUCTION CENTERLINE |
| | LIMIT OF GRADING |
| | REALIGNED CHANNEL |
| | LOG/ROOTWAD |
| | ROCK TOE PROTECTION (SITE A)<br>ROCK TOE PROTECTION (SITE B) |
| | STEP POOL (SITE A)<br>STEP POOL (SITE B) |
| | VEGETATED BOULDER REVETMENT |
| | OVERFLOW CHANNEL |
| | NATIVE MATERIAL REVETMENT |
| | WILLOW WALL REVETMENT |
| | RETENTION BASIN STABILIZATION |
| ▨ | BRUSH MAT/REVEGETATION |
| | FILL EXISTING CHANNEL |
| 4 | TREE – TO REMAIN.<br>4 INDICATES TREE NUMBER |
| | TREE – TO BE REMOVED.<br>4 INDICATES TREE NUMBER |
| | ROCK POOL |
| | AVAILABLE PLANTING AREA |

| REV | DESCRIPTION | DATE | APPR. | REFERENCE INFORMATION AND NOTES |
|---|---|---|---|---|
| | PRELIMINARY<br>NOT FOR CONSTRUCTION<br>07/10/08 | | | |

| | |
|---|---|
| DATE | 07–10–08 |
| DESIGN | K.N. |
| DRAWN | J. FORD |
| CHECKED | D.M. |

ENGINEERING CERTIFICATION

MICHAEL STUART THOMAS
No. C45957
Exp. 09/30/09
CIVIL

PROJECT ENGINEER 07/10/08 DATE

Santa Clara Valley Water District℠

ACCEPTED BY DISTRICT

PROJECT ENGINEER 07/10/08 MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN

## ALTERNATIVE 1 – RECOMMENDED PROJECT

## ABBREVIATIONS, LEGEND & SYMBOLS

SCALE
NOT TO SCALE

VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER
91854002

SHEET CODE:
G–3

PAGE NUMBER:
3 OF 38

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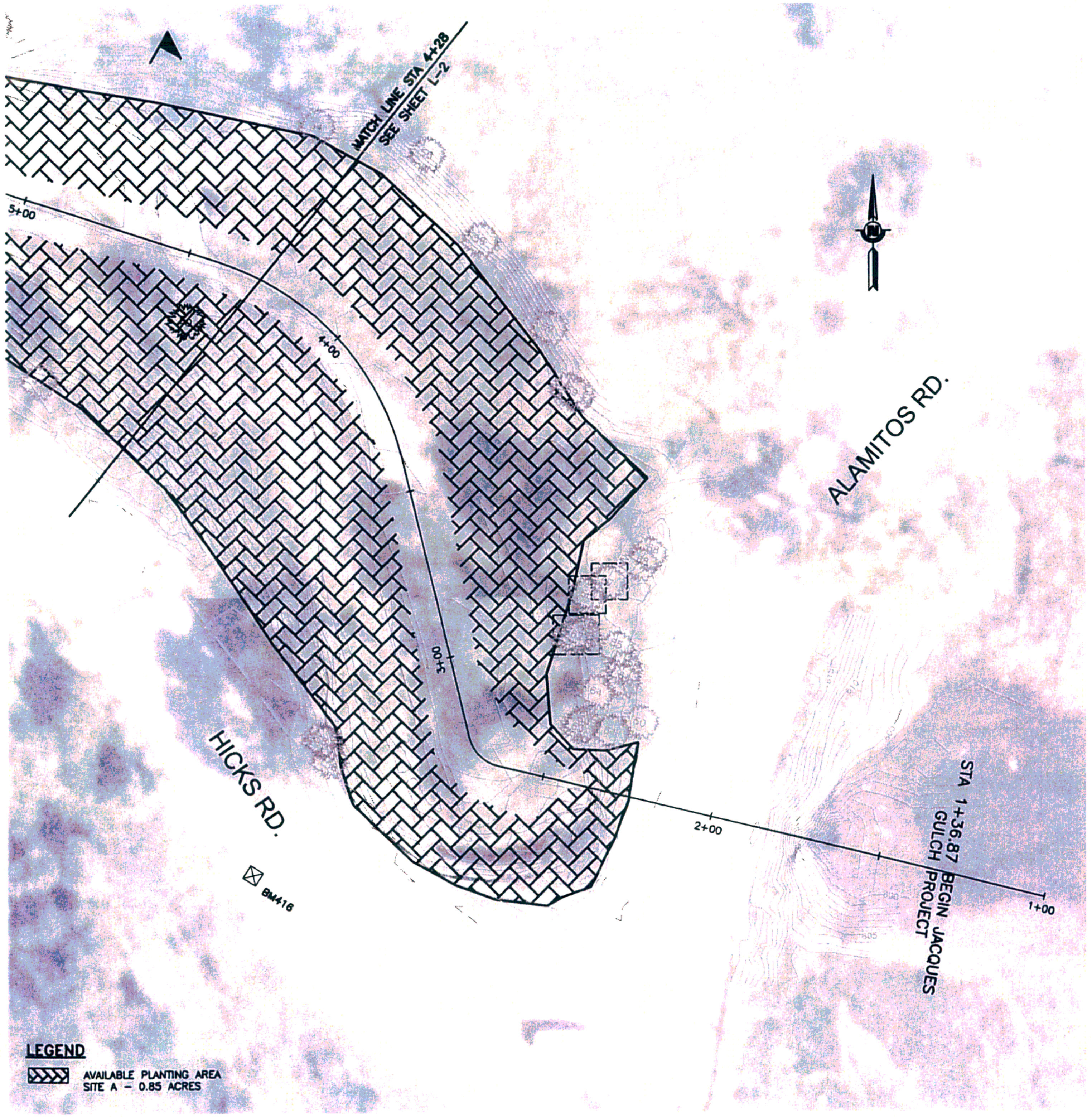

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PH: (415) 454–8868

DATE 07–10–08
DESIGN KN
DRAWN MW_MB
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MICHAEL STUART THOMAS
No. C48957
Exp. 09/30/09
07/10/08
PROJECT ENGINEER DATE

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PROJECT ENGINEER 07/10/08 MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN
## ALTERNATIVE 1 – RECOMMENDED PROJECT
## SITE A PLANTING PLAN

SCALE 1"=20'
VERIFY SCALES
0 1"
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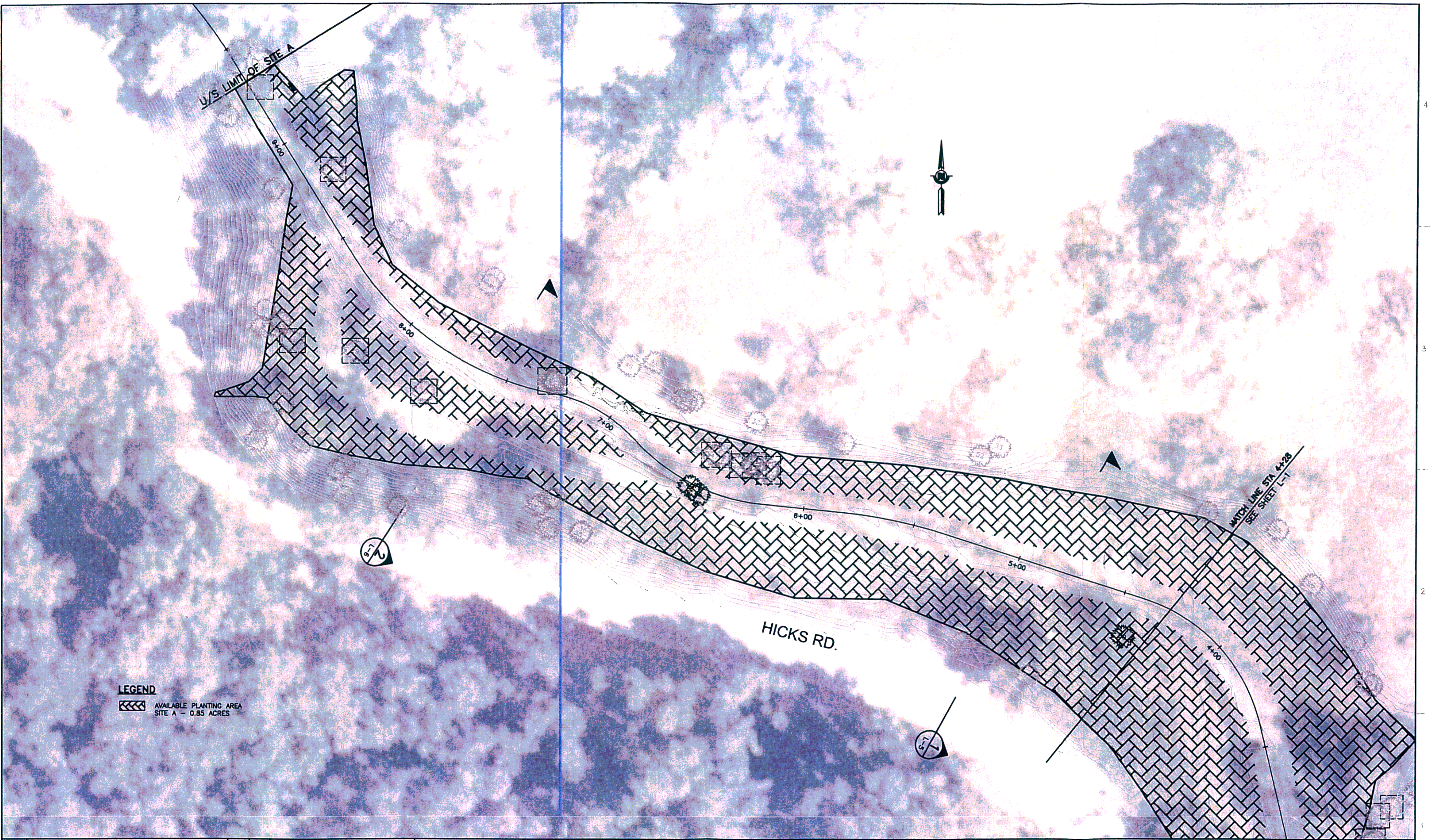
PROJECT NUMBER 91854002
SHEET CODE: L–1
PAGE NUMBER: 31 OF 38



**LEGEND**

▨ AVAILABLE PLANTING AREA
SITE A – 0.85 ACRES

| REV | DESCRIPTION | DATE | APPR. |
|---|---|---|---|
| | PRELIMINARY<br>NOT FOR CONSTRUCTION<br>07/10/08 | | |

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07-10-08
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MICHAEL STUART THOMAS
No. C48937
Exp. 09/30/09
CIVIL
STATE OF CALIFORNIA
07/10/08
PROJECT ENGINEER DATE

Santa Clara Valley Water District

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PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN

## ALTERNATIVE 1 – RECOMMENDED PROJECT

## SITE A PLANTING PLAN

SCALE
1"=20'
VERIFY SCALES
0 1"
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PROJECT NUMBER
91854002
SHEET CODE:
L-2
PAGE NUMBER:
32 OF 38

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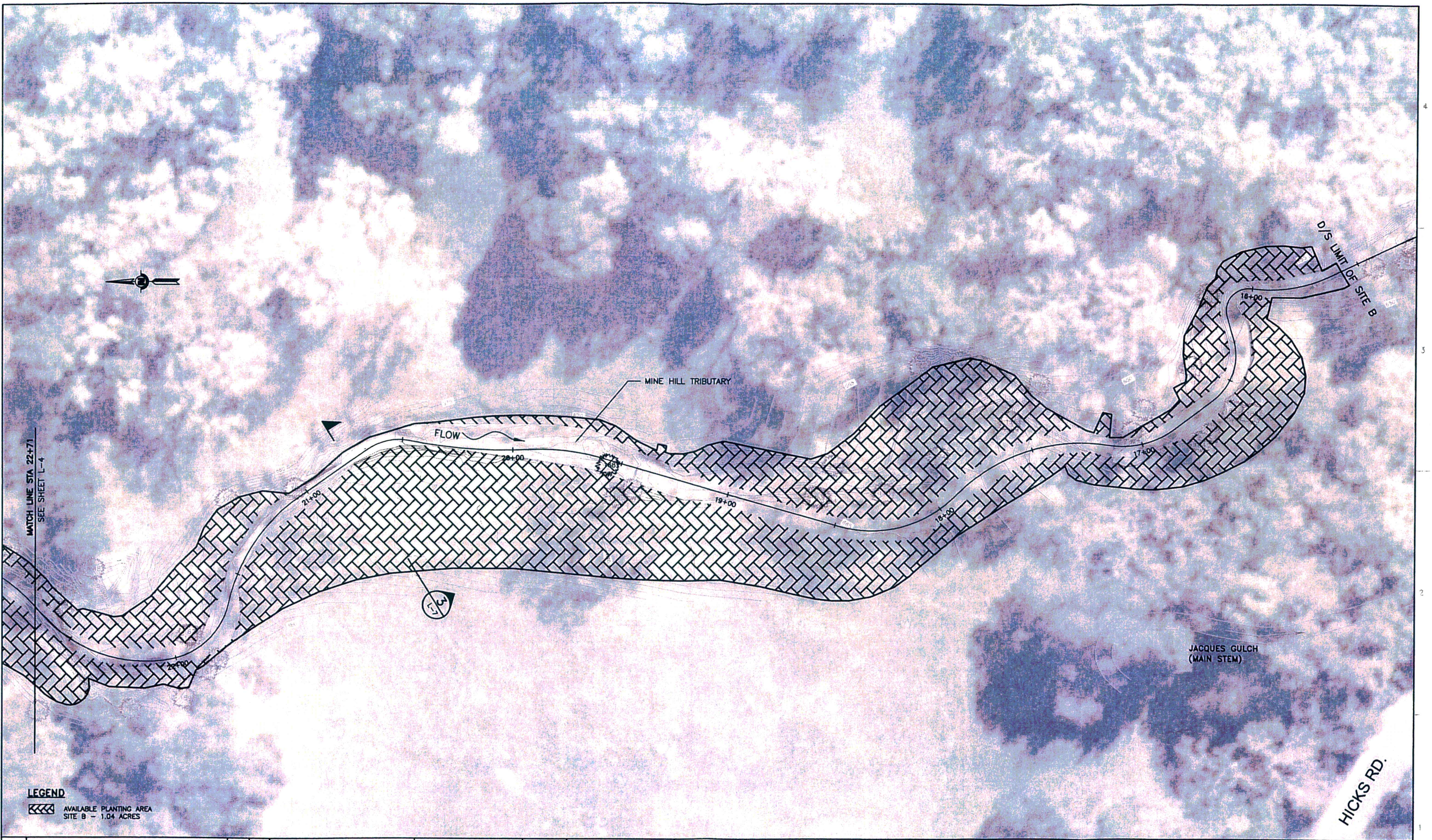

**LEGEND**

▨ AVAILABLE PLANTING AREA
SITE B – 1.04 ACRES

| REV | DESCRIPTION | DATE | APPR. | REFERENCE INFORMATION AND NOTES |
|---|---|---|---|---|
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|---|---|
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MICHAEL STUART THOMAS
No. C46957
Exp. 09/30/09
CIVIL
PROJECT ENGINEER DATE 07/10/08

Santa Clara Valley Water District

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PROJECT ENGINEER 07/10/08 MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH CONCEPTUAL RESTORATION PLAN

## ALTERNATIVE 1 – RECOMMENDED PROJECT

## SITE B PLANTING PLAN

SCALE 1"=20'

VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER 91854002

SHEET CODE: L-3

PAGE NUMBER: 33 OF 38

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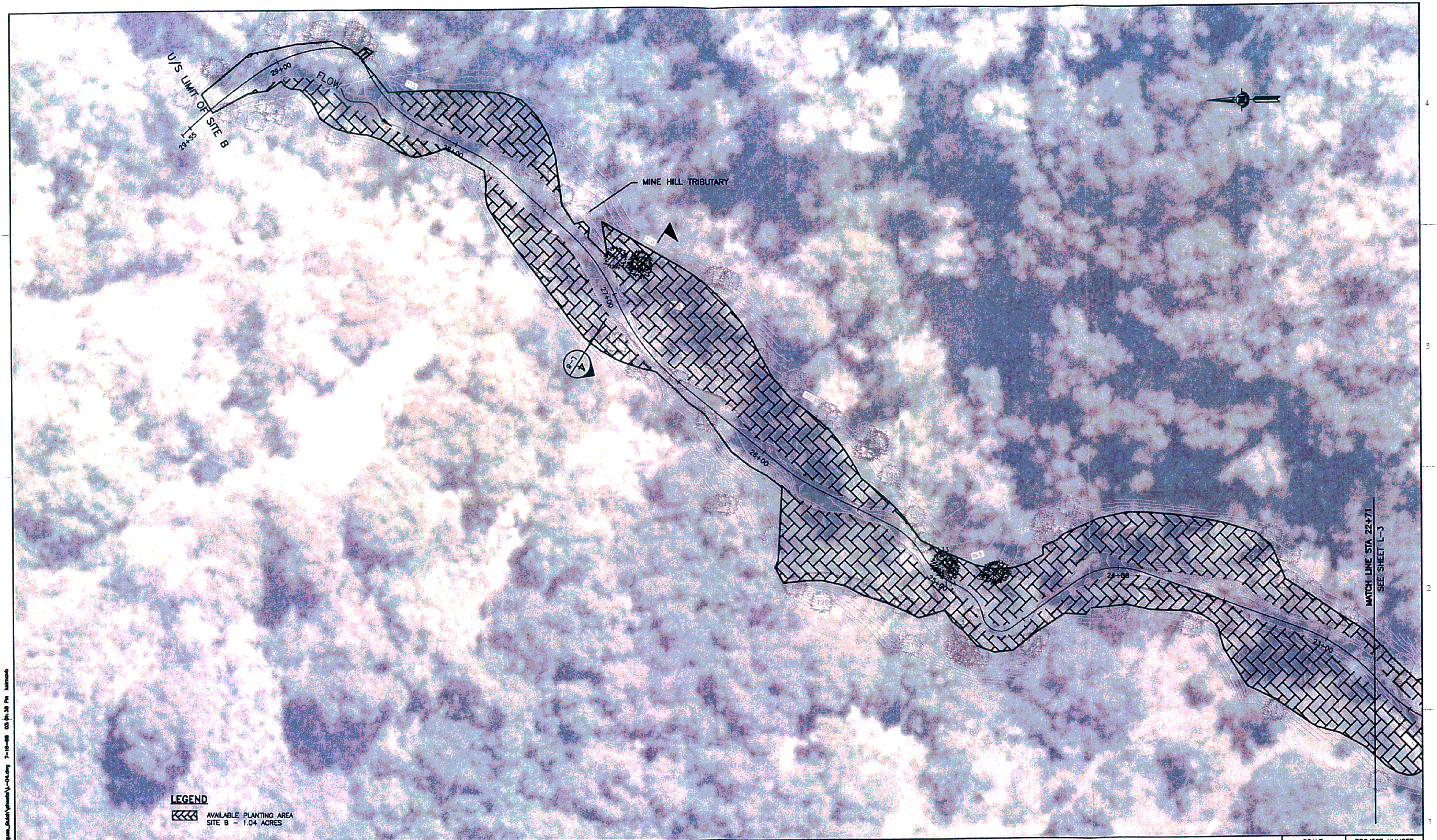

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MICHAEL STUART THOMAS
No. C48957
Exp. 09/30/09
07/10/08
PROJECT ENGINEER DATE

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07/10/08
PROJECT ENGINEER MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

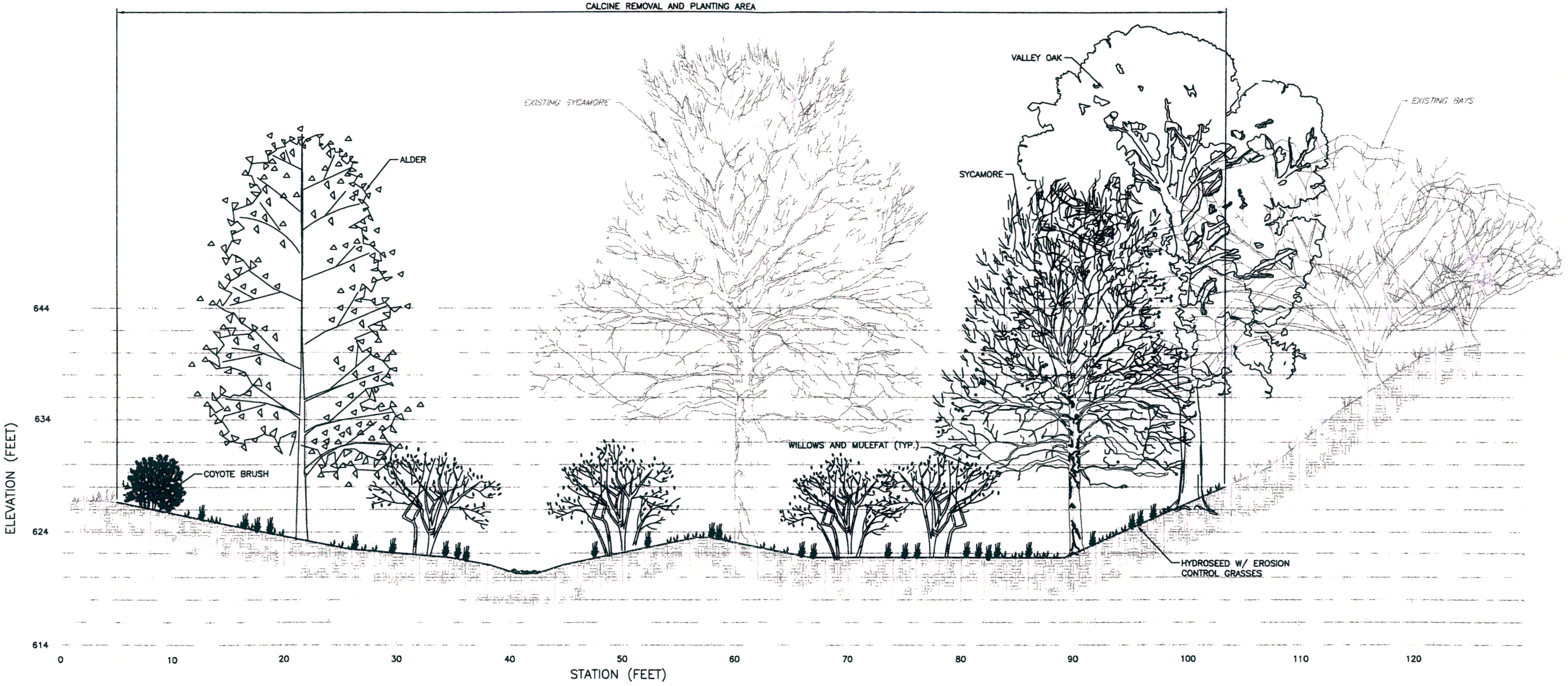
# JACQUES GULCH CONCEPTUAL RESTORATION PLAN

## ALTERNATIVE 1 - RECOMMENDED PROJECT

## SITE B PLANTING PLAN

SCALE 1"=20'
VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER 91854002
SHEET CODE: L-4
PAGE NUMBER: 34 OF 38



1
L-2
RESTORATION CROSS-SECTION

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| REV | DESCRIPTION | DATE | APPR. | REFERENCE INFORMATION AND NOTES |
|---|---|---|---|---|
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DATE: 07-10-08
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MICHAEL STUART THOMAS
No. C48957
Exp. 09/30/09
07/10/08
PROJECT ENGINEER DATE

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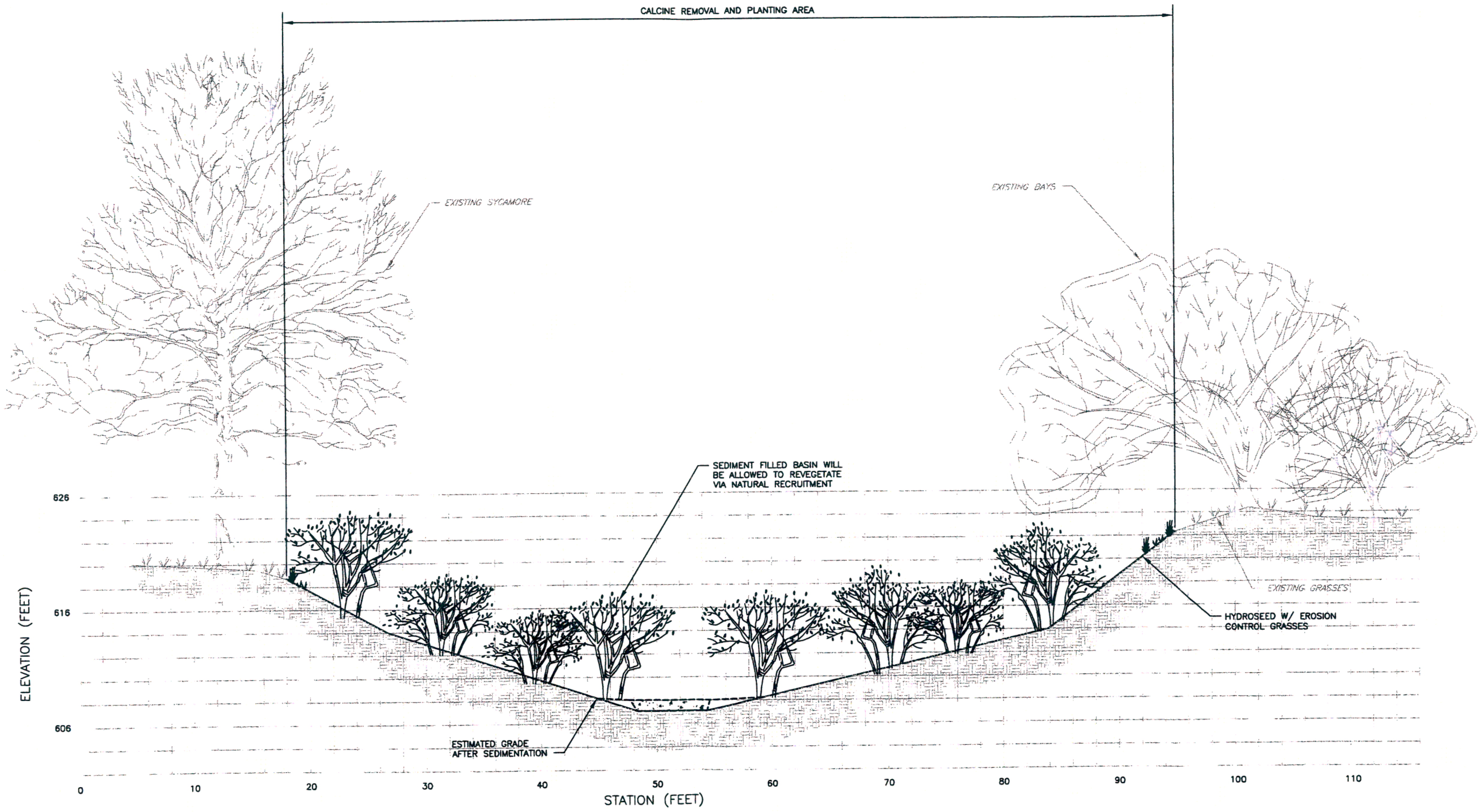
07/10/08
PROJECT ENGINEER MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN
## ALTERNATIVE 1 – RECOMMENDED PROJECT
## SITE A LANDSCAPE CROSS–SECTIONS

SCALE: 1"=–5'
VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER: 91854002
SHEET CODE: L–5
PAGE NUMBER: 35 OF 38


CALCINE REMOVAL AND PLANTING AREA
EXISTING SYCAMORE
EXISTING BAYS
SEDIMENT FILLED BASIN WILL BE ALLOWED TO REVEGETATE VIA NATURAL RECRUITMENT
EXISTING GRASSES
HYDROSEED W/ EROSION CONTROL GRASSES
ESTIMATED GRADE AFTER SEDIMENTATION
626
616
606
ELEVATION (FEET)
0
10
20
30
40
50
60
70
80
90
100
110
STATION (FEET)

2 / L-2 RESTORATION CROSS-SECTION

| REV | DESCRIPTION | DATE | APPR. |
|---|---|---|---|
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Exp. 09/30/09
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07/10/08
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07/10/08
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PROJECT NAME AND SHEET DESCRIPTION

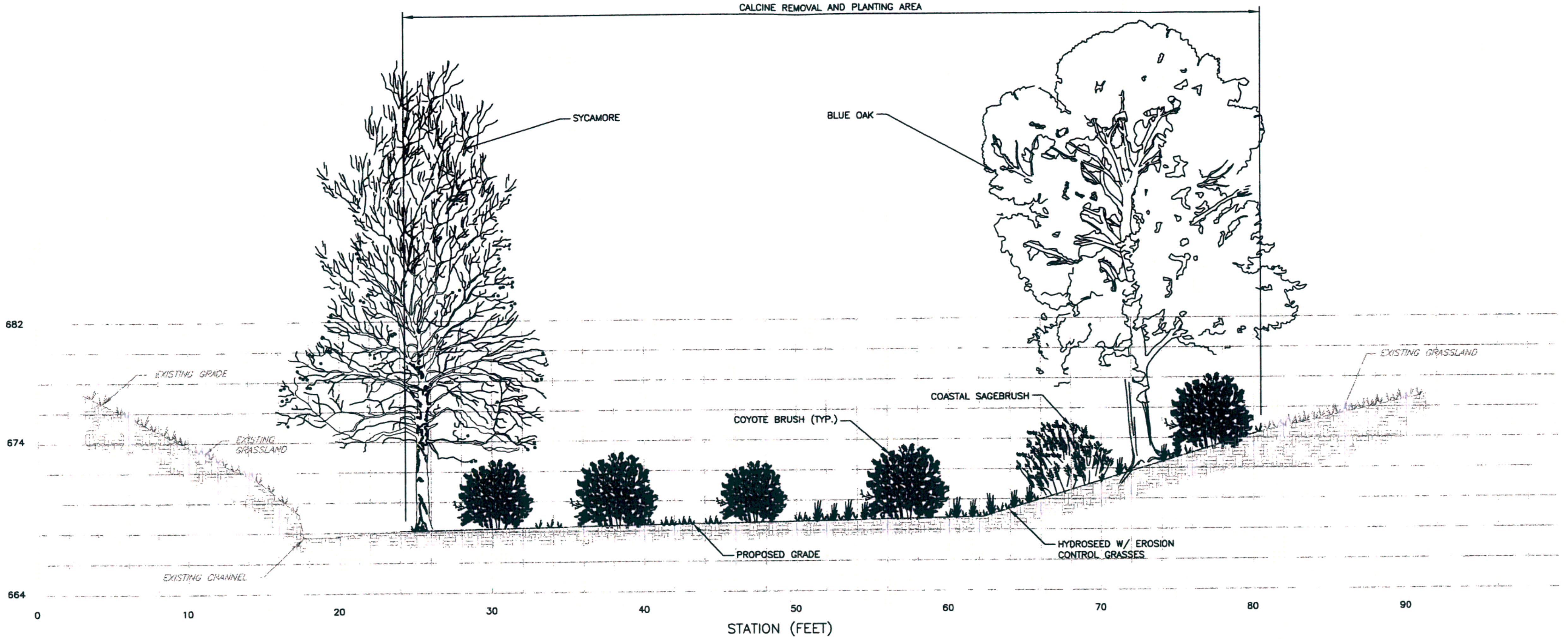
# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN
## ALTERNATIVE 1 – RECOMMENDED PROJECT
## SITE A LANDSCAPE CROSS-SECTIONS

SCALE
1"=5'

VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER
91845002

SHEET CODE:
L-6



3
L-3
RESTORATION CROSS-SECTION

| REV | DESCRIPTION | DATE | APPR. | REFERENCE INFORMATION AND NOTES |
|---|---|---|---|---|
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07/10/08
PROJECT ENGINEER DATE

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PROJECT ENGINEER MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN
## ALTERNATIVE 1 – RECOMMENDED PROJECT
## SITE B LANDSCAPE CROSS–SECTION

SCALE 1"=4'
VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER 91854002
SHEET CODE: L–7
PAGE NUMBER: 37 OF 38

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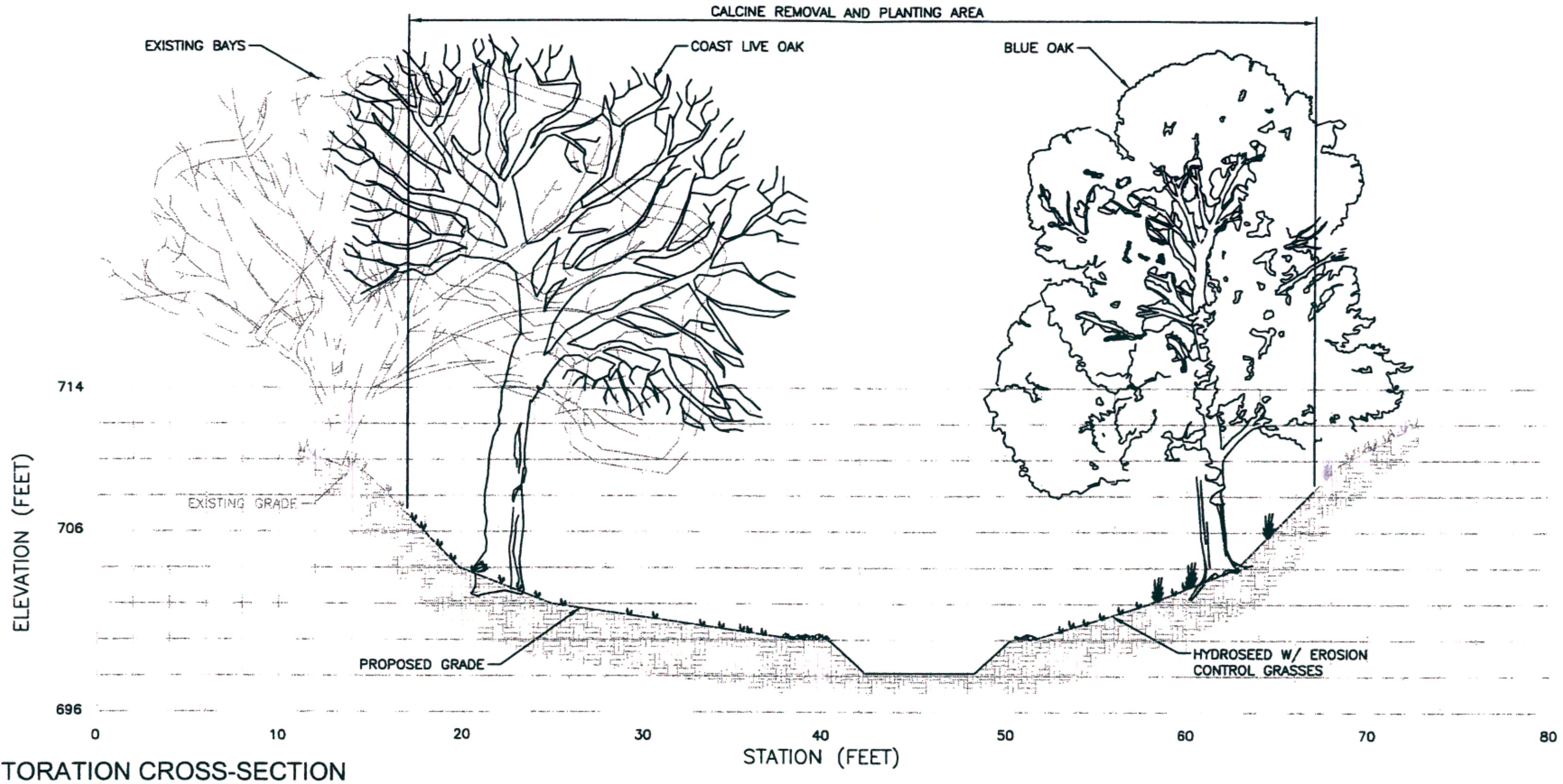

4
L-4
RESTORATION CROSS-SECTION

| REV | DESCRIPTION | DATE | APPR. | REFERENCE INFORMATION AND NOTES |
|---|---|---|---|---|
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MICHAEL STUART THOMAS
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STATE OF CALIFORNIA
PROJECT ENGINEER 07/10/08 DATE

Santa Clara Valley Water District
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PROJECT ENGINEER 07/10/08 MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION
JACQUES GULCH
CONCEPTUAL RESTORATION PLAN
ALTERNATIVE 1 – RECOMMENDED PROJECT
SITE B LANDSCAPE CROSS-SECTION

SCALE 1"=5'
VERIFY SCALES
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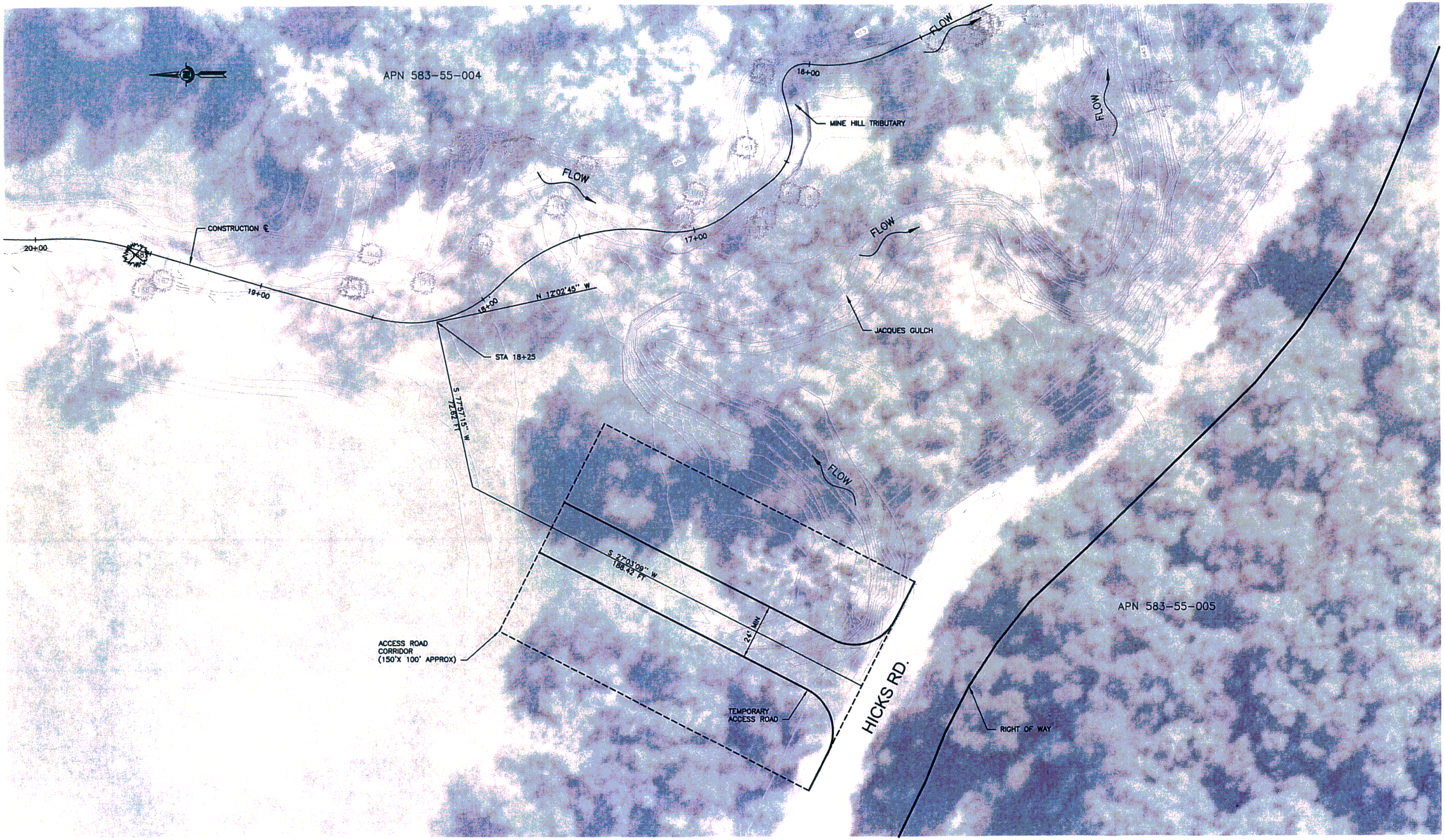
PROJECT NUMBER 91854002
SHEET CODE: L-8
PAGE NUMBER: 38 OF 38

Figure 1-6

Site B Temporary Access
Options 1 and 2

*Second allowed page (BLANK) for back of Fig 1-6 title sheet*



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|---|---|---|---|
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REFERENCE INFORMATION AND NOTES

1. REFER TO SHEETS C-3 AND C-4 FOR SITE B RESTORATION PLAN

| | |
|---|---|
| DATE | 07-10-08 |
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| DRAWN | L.P. |
| CHECKED | D.M. |

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Exp. 09/30/09
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07/10/08
PROJECT ENGINEER DATE

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PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN

## ALTERNATIVE 1 - RECOMMENDED PROJECT
## SITE B TEMPORARY CONSTRUCTION ACCESS PLAN
## OPTION 1

SCALE
1"=20'

VERIFY SCALES
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PROJECT NUMBER
91854002

SHEET CODE:
C-14

PAGE NUMBER:
25 OF 38

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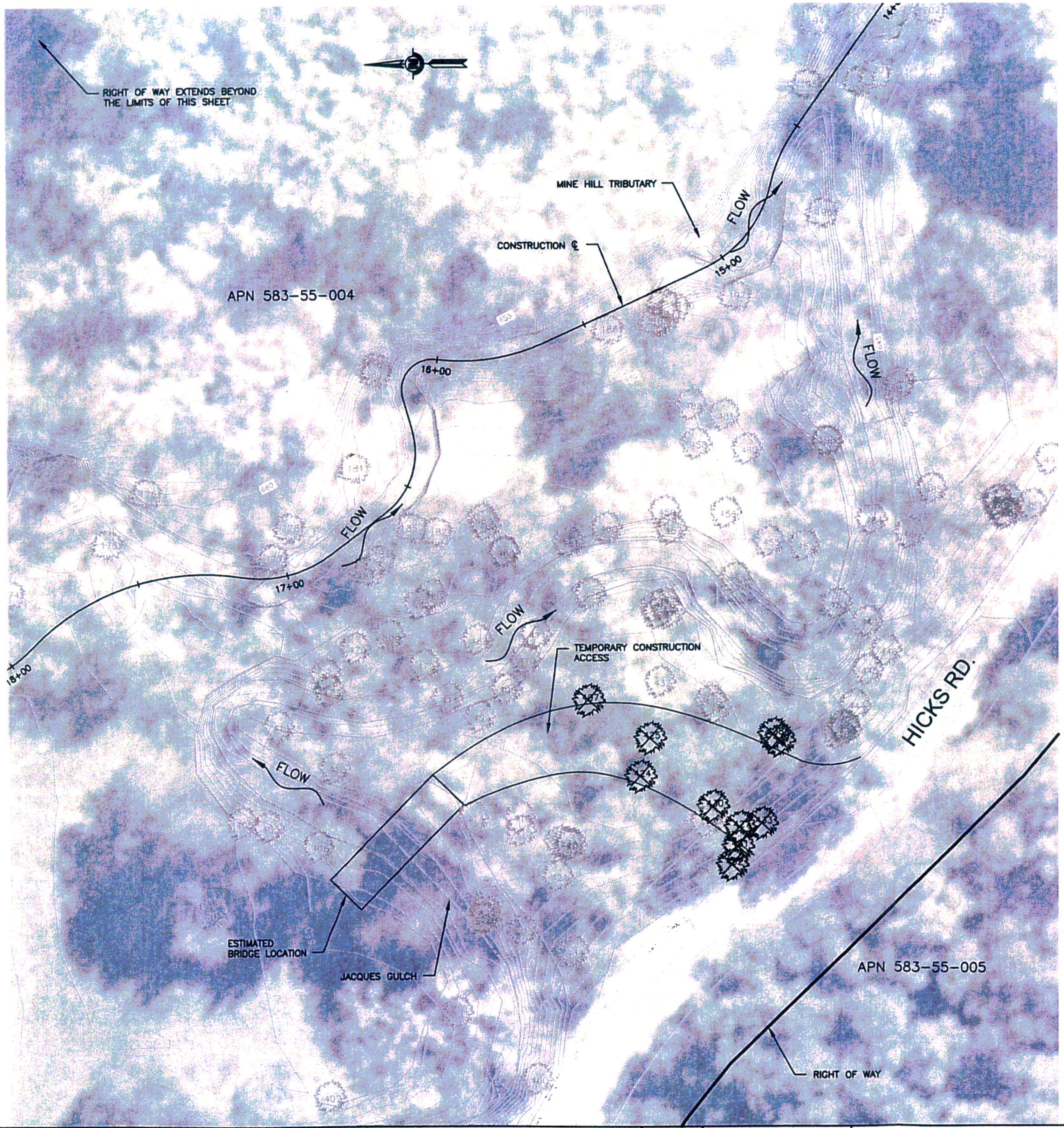

| NO. | TREE DESCRIPTION | TREE TO BE REMOVED |
|---|---|---|
| 400 | OAK 8. IN. | |
| 401 | SYCAMORE 60. IN. | |
| 402 | OAK 26. IN. | |
| 403 | OAK 18. IN. | |
| 404 | OAK 12. IN. | |
| 405 | OAK 34. IN. | |
| 406 | BAY 16. IN. | |
| 407 | OAK 12. IN. | YES |
| 408 | OAK 13. IN. | |
| 409 | OAK 12. IN. | |
| 410 | MAPLE 12. IN. | |
| 411 | BAY 16. IN. | |
| 412 | OAK 26. IN. | |
| 413 | BAY 8. IN. | |
| 414 | BAY 20. IN. | |
| 415 | OAK 24. IN. | |
| 416 | OAK 24. IN. | |
| 417 | OAK 14. IN. | |
| 418 | OAK 14. IN. | |
| 419 | OAK 14. IN. | |
| 420 | BAY 22. IN. | |
| 421 | BAY 6. IN. | |
| 422 | BAY 6. IN. | |
| 423 | BAY 6. IN. | |
| 424 | BAY 12. IN. | YES |
| 425 | BAY 14. IN. | YES |
| 426 | BAY 14. IN. | |
| 427 | BAY 8. IN. | YES |
| 428 | MAPLE 18. IN. | |
| 429 | MAPLE 10. IN. | |
| 430 | MAPLE 6. IN. | YES |
| 431 | OAK 6. IN. | YES |
| 432 | OAK 6. IN. | YES |
| 433 | OAK 6. IN. | YES |
| 434 | OAK 18. IN. | |
| 435 | OAK 12. IN. | |
| 436 | OAK 12. IN. | |
| 437 | OAK 6. IN. | |
| 438 | OAK 20. IN. | YES |
| 439 | OAK 12. IN. | YES |
| 440 | BAY 20. IN. | |
| 441 | BAY 16. IN. | |
| 442 | BAY 10. IN. | |
| 443 | BAY 10. IN. | |
| 444 | BAY 10. IN. | |
| 445 | SYCAMORE 26. IN. | |
| 446 | SYCAMORE 8. IN. | |
| 447 | BAY 9. IN. | |
| 448 | OAK 24. IN. | |
| 449 | OAK 24. IN. | |
| 450 | OAK 24. IN. | |
| 451 | OAK 6. IN. | |
| 452 | OAK 18. IN. | |
| 453 | SYCAMORE 24. IN. | |
| 454 | SYCAMORE 60. IN. | |
| 455 | BAY 10. IN. | |
| 456 | BAY 18. IN. | |
| 457 | OAK 36. IN. | |
| 458 | OAK 24. IN. | |

| NO. | TREE DESCRIPTION | TREE TO BE REMOVED |
|---|---|---|
| 459 | BAY 10. IN. | |
| 460 | OAK 10. IN. | |
| 461 | OAK 6. IN. | |
| 462 | OAK 14. IN. | |
| 463 | OAK 16. IN. | |
| 464 | OAK 16. IN. | |
| 465 | OAK 8. IN. | |
| 466 | OAK 10. IN. | |
| 467 | OAK 12. IN. | |
| 468 | OAK 12. IN. | |
| 469 | BAY 10. IN. | |
| 470 | BAY 18. IN. | |
| 471 | OAK 36. IN. | |
| 472 | BAY 10. IN. | |
| 473 | OAK 40. IN. | |
| 474 | OAK 8. IN. | |
| 475 | BAY 12. IN. | |
| 476 | OAK 20. IN. | |
| 477 | OAK 18. IN. | |
| 478 | OAK 18. IN. | |
| 479 | OAK 12. IN. | |
| 480 | OAK 8. IN. | |
| 481 | OAK 8. IN. | |
| 482 | OAK 14. IN. | |
| 483 | OAK 14. IN. | |
| 484 | BAY 20. IN. | |
| 485 | BAY 22. IN. | |
| 486 | OAK 40. IN. | |
| 487 | OAK 40. IN. | |
| 488 | OAK 20. IN. | |
| 489 | OAK 20. IN. | |
| 490 | OAK 20. IN. | |
| 491 | MAPLE 6. IN. | |

| REV | DESCRIPTION | DATE | APPR. |
|---|---|---|---|
| | PRELIMINARY<br>NOT FOR CONSTRUCTION<br>07/10/08 | | |

REFERENCE INFORMATION AND NOTES

1. REFER TO SHEETS C-3 AND C-4 FOR SITE B RESTORATION PLAN

| | |
|---|---|
| DATE | 07-10-08 |
| DESIGN | K.N. |
| DRAWN | L. PENILL |
| CHECKED | D.M. |

ENGINEERING CERTIFICATION

REGISTERED PROFESSIONAL ENGINEER
MICHAEL STUART THOMAS
No. C48957
Exp. 09/30/09
CIVIL
STATE OF CALIFORNIA

PROJECT ENGINEER 07/10/08 DATE

Santa Clara Valley Water District

ACCEPTED BY DISTRICT

PROJECT ENGINEER 07/10/08 MM/DD/YY

PROJECT NAME AND SHEET DESCRIPTION

# JACQUES GULCH
# CONCEPTUAL RESTORATION PLAN

## ALTERNATIVE 1 – RECOMMENDED PROJECT
## SITE B TEMPORARY CONSTRUCTION ACCESS PLAN
## OPTION 2

SCALE 1"=20'

VERIFY SCALES
0 1"
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER 91854002

SHEET CODE: C-15

PAGE NUMBER: 26 OF 38

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# APPENDIX A

# MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

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## ***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| **AIR QUALITY** | | | | | |
| Dust Control Measures | Air-1 | **Prepare and implement asbestos dust mitigation plan.** An Asbestos Dust Mitigation Plan shall be prepared by SCVWD, or its contractor, and submitted to and approved by the Bay Area Air QLality Management District before the start of any construction or grading activity. The plan shall be prepared and implemented according to the requirements of 17 Cal. Code Regs. 93105 (CARB Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations). | Throughout construction | District | District |
| Dust Control Measures | BMP AQ-1 | Implement Bay Area Air Quality Management District (BAAQMD) Basic Control Measures for construction emissions of $PM_{10}$ at all construction sites. Current measures stipulated by the BAAQMD CEQA Guidelines include the following (BAAQMD 1999):<br>1. Active areas shall be watered at least twice per day unless soils are already sufficiently moist to avoid dust. The amount of water must be controlled so that runoff from the site does not occur, yet dust control is achieved.<br>2. Trucks hauling soil, sand, and other loose materials shall be covered or shall maintain at least two feet of freeboard.<br>3. Unpaved access roads, parking areas and staging areas at construction sites shall be paved, watered three times daily, or non-toxic soil stabilizers shall be applied to control dust generation.<br>4. Paved site access roads, parking areas, and staging areas shall be swept daily (with vacuum-powered street sweepers).<br>5. Paved public streets shall be swept (with vacuum-powered street sweepers) if visible soil material is carried onto adjacent paved surfaces. | Throughout construction | District | District |

| ***JACQUES GULCH RESTORATION PROJECT***<br>MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE | | | | | |
|---|---|---|---|---|---|
| **Environmental Issue** | **Measure Element #** | **Mitigation Measure** | **Timeframe for Implementation** | **Responsibility for Implementation** | **Responsibility for Oversight** |
| | | 6. Inactive areas (previously graded areas inactive for ten days or more) shall be sprayed with soil stabilizer or seeded.<br>7. Exposed stockpiles (dirt, sand, etc.) shall be watered twice daily, enclosed, covered, or sprayed with soil stabilizers.<br>8. Traffic speeds on unpaved roads shall be limited to 15 mph.<br>9. Vegetation in disturbed areas shall be replanted as soon as horticulturally appropriate. For example, plant material may not be ready as soon as the job is done (e.g. willow cuttings have to be collected during winter dormancy).<br>10. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. | | | |

## *JACQUES GULCH RESTORATION PROJECT*
## MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| Dust Control Measures | BMP AQ-2 | Bay Area Air Quality Management District Enhanced Dust Control Measures (sites greater than 4 acres in size) For sites greater than four acres in size, implement Bay Area Air Quality Management District Enhanced Dust Control Measures. Current measures stipulated by the BAAQMD CEQA Guidelines include the following (BAAQMD 1999):<br>1. All BAAQMD "Basic" control measures.<br>2. Inactive areas (previously graded areas inactive for ten days or more) shall be sprayed with soil stabilizer or seeded.<br>3. Exposed stockpiles (dirt, sand, etc.) shall be watered twice daily, enclosed, covered, or sprayed with soil stabilizers.<br>4. Traffic speeds on unpaved roads shall be limited to 15 mph.<br>5. Sandbags or other bank protections shall be installed to prevent silt runoff to roadways.<br>Vegetation in disturbed areas shall be replanted as soon as horticulturally appropriate. For example, plant material may not be ready as soon as the job is done (e.g. willow cuttings have to be collected during winter dormancy). | Throughout construction | District | District |
| Dust Control Measures | BMP AQ-3 | Implement appropriate Bay Area Air Quality Management District (BAAQMD) Optional Control Measures for construction emissions of $PM_{10}$ at all construction sites. BAAQMD Optional Control Measures are strongly encouraged at construction sites that are large in area, located near sensitive receptors, or which for any other reason may warrant additional emissions reductions. Current measures stipulated by the BAAQMD CEQA Guidelines include the following (BAAQMD 1999):<br>1. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. | Throughout construction | District | District |

***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| | | 2. Install wind breaks or plant trees/vegetation wind breaks at windward side(s) of construction areas.<br>3. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.<br>4. Limit the area subject to excavation, grading, and other construction activity at any one time.<br>Additional District control measures that may be used if applicable include:<br>1. Tailgates of trucks shall be sealed.<br>Trucks shall be brushed down before leaving the site. | | | |
| Dust Control Measures | BMP AQ-4 | Some sediment removal sites will have sediment that is rich in organic matter decaying in an anaerobic condition, which generates assorted malodorous gases, such as reduced sulfur compounds. These sediments will be handled in a manner that avoids impacting sensitive receptors.<br>1. Avoid stockpiling potentially odorous sediments within 1,000 feet of residential areas or other odor sensitive land uses.<br>Where appropriate, odorous stockpiles will be disposed of at an appropriate landfill. | Throughout construction | District | District |

| ***JACQUES GULCH RESTORATION PROJECT***<br>MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY | | | | | |
|---|---|---|---|---|---|
| **Environmental Issue** | **Measure Element #** | **Mitigation Measure** | **Timeframe for Implementation** | **Responsibility for Implementation** | **Responsibility for Oversight** |
| **BIOLOGICAL RESOURCES** | | | | | |
| Special Status Species | Bio-1 | **Perform bat surveys surveys.** Potential bat roosts could occur as cavities in the large sycamores at the lower portion of Site B. No large trees are expected to be removed during construction practices; however, work conducted near the large trees in the project area has the potential to disturb potential bat roosts.<br>If work is to take place during months when bats may be breeding (April through August) or hibernating (November through March), a bat survey shall be conducted. Surveys shall be conducted in late April or early May, when bats are establishing maternity roosts but before the females give birth. If bats are detected, three options may be available. The first and preferred option is to avoid disturbances near the tree (a minimum 100 foot buffer) until after the breeding period has ended but prior to the hibernation period (September through October). The second option would be to permit the encroachment on the 100 foot buffer by construction activities, but under the supervision of a biological monitor. If the monitor observes bats leaving the roost site during construction activities, then all work near the tree will be halted and the appropriate buffer would be reinstated. The third option, exclusion of bats, should only be done as a last resort. The nature of the tree cavities, the rugged terrain and the extensive tree height may prove difficult for the installation of bat exclusion devices. Exclusion devices may include plastic flaps, screening or polypropylene netting of ¼-inch mesh or a short length of PVC pipe. Exclusion devices will be removed upon completion of construction activities. | Pre-construction | District | District |

## *JACQUES GULCH RESTORATION PROJECT*
## MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| Special Status Species | Bio-2 | **Flag and avoid woodrat houses.** *Woodrat houses shall* be flagged and avoided during construction activities. If disturbance of the stick houses is unavoidable, a qualified biologist shall supervise clearing of the houses. The availability of suitably sized sticks may limit the number of woodrat houses. Sticks from the dismantled house shall be kept onsite, near the dismantled house if possible. | Throughout construction | *District* | *District* |
| Special Status Species | Bio-3 | **Erect exclusion fencing and monitor for previously undetected species.** If required by the U.S. Fish and Wildlife Service or the District, an exclusion fence shall be erected around the perimeter of the construction area to prevent species from entering the construction site, and a construction monitor shall be present during ground clearing activities to remove any wildlife species found within the fenced area. Preconstruction and cursory surveys will be done in the project area in order to detect sensitive herpetofauna. A construction monitor will also be present during ground clearing activities to remove any wildlife species found within the fenced area. If a foothill yellow-legged frog is observed in the construction area, relocation of the species to a pre-approved area would be permitted by a DFG-approved biologist with agency correspondence. | Throughout construction | District | District |

## ***JACQUES GULCH RESTORATION PROJECT***

## MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| Special Status Species | Bio-4 | **Remove and salvage Loma Prieta hoita.** Mitigation for the Loma Prieta hoita shall be included in the Riparian Mitigation and Monitoring Plan prepared as part of the Streambed Alteration Agreement application for CDFG. This plan shall include transplanting techniques, a monitoring program acceptable to DFG, performance criteria and contingency propagation measures to ensure that a stand of Loma Prieta hoita is restored within the project area. After removal, the plants shall be held in a nursery until the excavation and grading of the project area is complete. After construction, the plants shall be replanted in a shaded understory area in Site B. A contingency plan involving collection of ripe seeds from the plants shall ensure that any mortality of transplanted individuals can be compensated with planting of the collected seeds. In order to ensure viable seed is available for collection, the District shall install exclusionary fencing around the plants during the flowering period to minimize browsing by deer | Pre- and Post-construction | District | District |
| Salvage Native Aquatic Vertebrates from Dewatered Channels | BMP BI-2 | If native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, native aquatic vertebrates will be relocated at the discretion of a qualified biologist to ensure that native aquatic vertebrates are not significantly impacted.<br>A site by site evaluation of species present or potentially present and habitat conditions will be made by a qualified biologist. When native aquatic vertebrate relocation efforts are warranted, the operation will be based on the District's Fish Relocation Guidelines. | Throughout construction | District | District |

## ***JACQUES GULCH RESTORATION PROJECT***
## MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| **Environmental Issue** | **Measure Element #** | **Mitigation Measure** | **Timeframe for Implementation** | **Responsibility for Implementation** | **Responsibility for Oversight** |
|---|---|---|---|---|---|
| Migratory Bird Surveys | BMP BI-8 | Migratory bird surveys will be performed prior to any project-related activity that could pose the potential to affect migratory birds. Inactive bird nests may be removed, with the exception of raptor nests.<br>No birds, nests with eggs, or nests with hatchlings will be disturbed. | Throughout construction | District | District |
| Migratory Bird Nesting Prevention – Vegetation Clearing | BMP BI-9 | Vegetation can be cleared and maintained to prevent migratory bird nesting. All necessary vegetation clearing will be performed prior to the nesting season, if at all possible. No vegetation will be trimmed back unnecessarily, including trees and/or shrubs growing near the right of way, which overhang onto the work site. | Throughout construction (as necessary) | District | District |
| Erosion and Sediment Control Measures | BMP WQ-41 | A Stormwater Pollution Prevention Plan (SWPPP) will be prepared and submitted in compliance with the requirements of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater Associated with Construction Activity (NPDES Permit No. CAS000002, Order No. 99-08-DWQ). Suitable stormwater BMPs will be implemented consistent with California Stormwater Quality Association "Stormwater Best Management Practices Handbook," Construction 2003, which is available at http://www.cabmphandbooks.com. | Throughout construction | District | District |

***JACQUES GULCH RESTORATION PROJECT***

MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

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|---|---|---|---|---|---|
| CULTURAL RESOURCES | | | | | |
| Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. | Cult-1a | **Stop earthwork if unknown historic or prehistoric resources are detected.** In accordance with CEQA Guideline §15064.5 (f), should any previously unknown historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable soils, glass, metal, ceramics, wood or similar debris, be discovered during grading, trenching, or other onsite excavation(s), earthwork within 100 feet of these materials shall be stopped until a professional archaeologist certified by the Registry of Professional Archaeologists (RPA) has an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary to protect the resource. | Throughout construction | District | District |
| Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. | Cult-1a | Cult-1a (See above) | Throughout construction | District | District |
| Disturb any human remains, including those interred outside of formal cemeteries. | Cult-2a | **Discovery of Native American Human Remains.** In the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code should be followed. Section 7050.5(b) of the California Health and Safety Code states:<br>• In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county | Throughout construction | District | District |

***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| | | in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.<br>The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within twenty-four hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for "protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction." A combination of preconstruction worker training and intermittent construction monitoring by a qualified archaeologist will serve to achieve compliance with this requirement for protection of human remains. Worker training typically instructs workers as to the potential for discovery of cultural or human remains, and both the need for proper and timely reporting of such finds, and the consequences of failure thereof. Once the find has been identified, the archaeologist will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be significant according to CEQA. | | | |

***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
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| **GEOLOGY AND SOILS** | | | | | |
| Cause substantial soil erosion or the loss of top soil | BMP WQ-9 | In-channel vegetation removal may result in increased local erosion due to increased flow velocity.<br>To minimize the effect, the toe of the bank will be protected by leaving vegetation to the maximum extent practicable consistent with the SMP maintenance guidelines. | Throughout construction | District | District |
| Cause substantial soil erosion or the loss of top soil | BMP WQ-17 | Sites in the transport zone on alluvial fans may cause increased scour downstream if they experience rapid sediment accumulation after sediment removal.<br>Channel reaches up to 500 feet downstream from such sediment removal sites will be monitored to determine whether accelerated erosion is occurring. If downstream monitoring indicates that erosion is occurring, then remedial action such as rock vortex weirs or similar protection will be carried out. | Throughout construction | District | District |
| Cause substantial soil erosion or the loss of top soil | BMP WQ-41 | A Stormwater Pollution Prevention Plan (SWPPP) will be prepared and submitted in compliance with the requirements of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater Associated with Construction Activity (NPDES Permit No. CAS000002, Order No. 99-08-DWQ). Suitable stormwater BMPs will be implemented consistent with California Stormwater Quality Association "Stormwater Best Management Practices Handbook," Construction 2003, which is available at http://www.cabmphandbooks.com. | Throughout construction | District | District |

**_JACQUES GULCH RESTORATION PROJECT_**
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
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| HAZARDS AND HAZARDOUS MATERIALS | | | | | |
| Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | Haz-1 | **Implement a worker safety and health program.** To protect workers during excavation, removal, transport, and consolidation of calcine and soil, a worker safety and health program shall be developed consistent with regulations and in light of site conditions. Such a program is required by CalOSHA.It is anticipated that Level D Personal Protective Equipment would be worn by all workers involved in or near to soils disturbance and movement, however, final determination of the required level of protection will be made at the time of project execution. Worker skin contact with contaminated soils, inhalation of dust, and contact with ground or surface water shall be minimized. All workers and site visitors shall be informed of the relevant aspects of the safety and health program and the responsible contractor shall monitor and enforce compliance. Risk management practices to be taken before, during, and after soil disturbance, excavation, and transportation shall include restricting the site to only those workers and individuals necessary for execution or inspection of the work. Visitors and other non-essential managers and personnel shall be kept at a distance adequate to ensure their safety. Visitors to the site shall be provided appropriate Personal Protective Equipment. The part of the site where active removal is occurring shall be fenced with temporary construction-type chain link fences at least 8 feet high to prevent unauthorized entry and the fence maintained for the duration of soil disturbance activities. The fence can then be removed or relocated to another active area. | Throughout construction | District | District |

| ***JACQUES GULCH RESTORATION PROJECT***<br>MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY | | | | | |
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| **Environmental Issue** | **Measure Element #** | **Mitigation Measure** | **Timeframe for Implementation** | **Responsibility for Implementation** | **Responsibility for Oversight** |
| Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | Haz-2 | Implement a fugitive dust control program. A fugitive dust control program shall be developed, approved, and implemented. The program will ensure that workers and the public are not exposed to harmful levels of soils and dusts generated during calcine or soil removal and transport. Fugitive dust control measures shall be implemented per a detailed program developed by the contractor and submitted to the District. Unless otherwise determined by the District or an appropriate regulatory body to not be required, this program shall include an onsite Air Quality Monitor (AQM), a Dust Control Plan (DCP), monitoring of the project sites and the transport route for visible dust plumes, and the application of more frequent and more extensive dust control methods, should standard methods be unable to control dust formation and migration. A temporary site shutdown may be ordered if efforts do not result in the cessation of dust generation.<br>Dust control measures shall be implemented and shall consist of the following:<br>• The project shall designate and retain onsite an Air Quality Monitor (AQM) who shall be responsible for directing and documenting compliance with dust control measures for the entire project site and transportation route to the consolidation area. The AQM shall have full access to all areas of excavation and loading on the site, and shall have the authority to stop any or modify all activities as warranted in order to ensure that these dust control measures remain adequate to control dust generation.<br>• Dust Control Plan (DCP) shall be developed and implemented to prevent the generation of dust during soils movement. The plan shall include measures to ensure the following: | Throughout construction | District | District |

## *JACQUES GULCH RESTORATION PROJECT*
## MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
|  |  | • All unpaved roads and disturbed areas in the project site shall be watered as frequently as necessary to comply with the dust mitigation objectives. The frequency of watering can be reduced or eliminated during periods of precipitation.<br>• No vehicle shall exceed 15 miles per hour within the site or on any unpaved road along the transport route to the soils repository.<br>• All site entrances shall be posted with visible speed limit signs.<br>• All vehicles leaving the site that have ridden on contaminated soil shall have their tires inspected and dirt removed and/or washed as necessary to be cleaned free of dirt prior to leaving the site and/or entering paved roadways. This is done with metal pikes, large wire brushes, and water. The volume of water is to be kept at a minimum and kept contained. Decontamination of vehicle tires shall be conducted. This can be done on top of 50-mil Visqueen plastic sheets with small berms on the perimeter to keep the water/soil from flowing off except into collection areas, or, if Visqueen plastic is not used, gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.<br>• Soil removal areas adjacent to any paved roadway shall be provided with sandbags or other measures as required to prevent runoff to roadways.<br>• All soil storage piles and disturbed areas that remain inactive for longer than 2 days, or if high wind conditions exist, shall be covered or shall be treated with appropriate dust suppressant compounds. |  |  |  |

***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| | | • All vehicles that are used to transport excavated material to the consolidation area and that have potential to cause visible dust emissions shall be provided with a cover or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.<br>• Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all areas of soil that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.<br>• The AQM shall monitor all soil removal activities on the site and the transport route for visible dust plumes. Observations of visible dust plumes that have the potential to be transported: (1) off the project site; (2) 100 feet beyond the centerline of the transport route; (3) within 25 feet downwind of any soil removal/excavation activity; (4) within the presence of onsite workers such that they will become exposed to an inhalation hazard shall be an indication that existing dust suppression/control measures are not resulting in effective mitigation. The AQM shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:<br>Step 1 The AQM shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.<br>Step 2 The AQM shall direct implementation of additional methods of dust suppression if Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination. | | | |

***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
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| | | Step 3 The AQM shall direct a temporary shutdown of the activity causing the emissions if Step 2 specified above fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQM is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. | | | |
| HYDROLOGY AND WATER QUALITY | | | | | |
| Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | BMP WQ-4 | Sediments will be stored and transported in a manner that minimizes water quality impacts.<br>1. Wet sediments may be stockpiled outside of a live stream or may be stockpiled within a dewatered stream so water can drain or evaporate before removal.<br>2. This measure applies to saturated, not damp, sediments and depends upon the availability of a stockpile site.<br>3. For those stockpiles located outside the channel, water draining from them will not be allowed to flow back into the creek or into local storm drains that enter the creek, unless water quality protection measures recommended by the RWQCB are implemented.<br>4. Trucks may be lined with an impervious material (e.g. plastic), or the tail gate blocked with dry dirt or hay bales, for example, or trucks may drain excess water by slightly tilting their loads and allowing the water to drain out.<br>5. Water will not drain directly into channels (outside of the work area) or onto public streets without providing water quality control measures.<br>Streets will be cleared of mud and/or dirt by street sweeping (with a vacuum-powered street sweeper), as necessary, and not by hosing down the street. | Throughout construction | District | District |

***JACQUES GULCH RESTORATION PROJECT***
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

| Environmental Issue | Measure Element # | Mitigation Measure | Timeframe for Implementation | Responsibility for Implementation | Responsibility for Oversight |
|---|---|---|---|---|---|
| Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | BMP WQ-5 | If soil is to be stockpiled, no run-off will be allowed to flow to a creek. | Throughout construction | District | District |
| Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | BMP WQ-9 | In-channel vegetation removal may result in increased local erosion due to increased flow velocity.<br>To minimize the effect, the toe of the bank will be protected by leaving vegetation to the maximum extent practicable consistent with the SMP maintenance guidelines. | Throughout construction | District | District |
| Erosion and Sediment Control Measures | BMP WQ-41 | A Stormwater Pollution Prevention Plan (SWPPP) will be prepared and submitted in compliance with the requirements of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater Associated with Construction Activity (NPDES Permit No. CAS000002, Order No. 99-08-DWQ). Suitable stormwater BMPs will be implemented consistent with California Stormwater Quality Association "Stormwater Best Management Practices Handbook," Construction 2003, which is available at http://www.cabmphandbooks.com. | Throughout construction | District | District |

## *JACQUES GULCH RESTORATION PROJECT*
MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY

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|---|---|---|---|---|---|
| **NOISE** | | | | | |
| Noise Pollution | BMP NO-1 | Noise produced by construction activities will not exceed the applicable local noise ordinance standards. | Throughout construction | District | District |
| Noise Management | BMP NO-2 | The District will implement practices that minimize disturbances to residential neighborhoods surrounding work sites.<br>1. In general, work will be conducted during normal working hours. Extending weekday hours and working weekends may be necessary to complete the projects.<br>2. Internal combustion engines will be equipped with adequate mufflers.<br>3. Excessive idling of vehicles will be prohibited.<br>4. All construction equipment will be equipped with manufacturer's standard noise control devices.<br>5. The arrival and departure of trucks hauling material will be limited to the hours of construction. | Throughout construction | District | District |
| **TRANSPORTATION AND TRAFFIC** | | | | | |
| Public Safety Measures | BMP TR-1 | Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction, to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof. | Throughout construction (as necessary) | District | District |
| Public Safety Measures | Tra-1 | **Tra-1: Coordination with the Santa Clara County Department of Parks and Recreation**. Prior to project implementation, coordination with the Department of Parks and Recreation is needed to ensure that an emergency response procedure is in place to allow appropriate access to Wood Road as needed by the Department of Parks and Recreation or emergency service providers. | Throughout construction (as necessary) | District | District |

# APPENDIX B

# RESPONSES TO COMMENTS JACQUES GULCH RESTORATION PROJECT DRAFT INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

# Appendix B: Responses to Comments
# Jacques Gulch Restoration Project
# Draft Initial Study/Mitigated Negative Declaration

August 2008

The Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Jacques Gulch Restoration Project was published on May 1, 2008. In addition to printed copies, the document was available on the SCVWD website. The public comment period ran through June 2, 2008. Written comments were received from the Department of Toxic Substances Control, the California Department of Fish and Game, the California Department of Transportation, and the Santa Clara County Parks and Recreation Department. Two public meetings were held, one on April 30, 2008, at the SCVWD Headquarters Boardroom, and one on May 22, 2008, at the New Almaden Community Center.

This Response to Comments document is organized as follows. A summary of a comment is provided, followed by a response to the comment. Where helpful, reference is made to particular sections of the IS/MND. The comment letters from the agencies are provided at the end of the text. Reference numbering has been added to each letter so as to link comments with responses.

## Department of Toxic Substances Control (DTSC) Letter, May 29, 2008

DTSC-1 DTSC recommends inclusion of background information in Section 2 Project Description regarding previous remediation activities in the park, including that DTSC is the state agency overseeing the cleanup of mercury contamination and that a Remedial Action Plan (RAP) for the park was approved by DTSC in 1994. DTSC further requests that remediated areas be identified and a summary provided of how the work was done. Also, An Explanation of Significant Differences (ESD) issued by DTSC in 2006 describes remediation needed in Jacques Gulch, which was not one of the areas included in the 1994 RAP.

*Response:* A paragraph is added to the IS/MND Section 2.2 Project Background. It reads as follows:

The Department of Toxic Substances Control (DTSC) is the state agency overseeing the cleanup of mercury contamination in the park. A Remedial Action Plan (RAP) for the park was approved in 1994. Subsequently, major remediation area was undertaken. The most notable remediation was in and around the Hacienda Furnace entrance to the park, near the west end of the community of New Almaden. Material excavated from this and other sites on park property was hauled to a DTSC-approved consolidation site on Mine Hill, within the park. The calcine was placed in a previously mined open pit area, consolidated, and capped. In addition, extensive removal and stabilization work was undertaken on the face of Mine Hill above Jacques Gulch. This was the location from which refining waste (calcine) had migrated downhill into Jacques Gulch several decades ago. Some material was removed from the slope, which was then regraded and extensive surface drainage control installed. An Explanation of Significant Differences (ESD) issued by DTSC in 2006 describes remediation needed in Jacques Gulch, which was not one of the areas included in the 1994 RAP.

DTSC-2 DTSC recommends that IS/MND Section 4.7 Hazard and Hazardous Materials include a discussion of the Remedial Design to be prepared for the project and approved by DTSC.

*Response:* The text of the MND has been modified to include this item.

The following text has been added to Section 4.7, at the end of the introductory section, immediately before the discussion of topic a.

Pending SCVWD Board of Directors' approval of the project's planning study, SCVWD will prepare design plans and specifications for approval by DTSC, consistent with DTSC's requirements for remedial design.

## California Department of Fish and Game (DFG) Letter, May 23, 2008

DFG-1 DFG requests clarification on the fate of the sediment retention basin at Site A, once it is filled (pages 5 and 47 of the IS/MND) and if there a plan to remove and dispose of potentially contaminated sediments collected in the basin. If not, DFG requests a discussion of potential impacts to water quality in terms of mercury concentrations and the potential for dissolved mercury to be transported downstream to Almaden Reservoir.

*Response:* The proposed project would remove visible calcine from within the project area. Some minor amount of calcine may remain and potentially could be mobilized by stream flows. With the proposed project, vegetation would be reestablished along the banks of the stream; the establishment of vegetation would reduce the potential for erosion and sediment transport and for the incidental mobilization of calcine remaining in the project area. The sediment basin would provide a mechanism to trap incidental calcine upstream of Almaden Reservoir. The sediment basin would also trap sediment loads naturally transported through the watershed. It is expected that calcine would comprise an extremely small fraction of the total sediment load trapped in the sediment basin and that once full, the sediments trapped by the sediment basin would have mercury levels at naturally occurring background concentrations. Excavation of the accumulated sediments would require the obliteration of newly established vegetation and would delay the establishment of a stable channel in Site A by approximately 2 years.

DFG-2 DFG refers to page 5 and drawings L-3 and G-3 (part of Figure 1-5) and requests clarification as to whether the current alignment of the lower reach of the Jacques Gulch tributary in Site B corresponds to its historical alignment. DFG strongly discourages realignment. DFG requests justification for channel realignment and an analysis of potential costs and benefits to hydrology, water quality, and biological resources. DFG also requests clarification of the fate of the abandoned portion of channel. DFG notes that the symbol for the abandoned channel segment in drawing L-3 is not the same as the symbol shown in the index page G-3. DFG also questions the placement of a rock toe on the east bank of the abandoned channel, and requests clarification on what is proposed for the abandoned segment of stream channel and that the text and figure are consistent.

*Response:* In the upper reach of the tributary, where the stream gradient is steep and the channel confined by adjacent steep slopes, the alignment is in its original location. For the most part, the historic alignment of the channel in the lower reach, which has a broad terrace, has been obliterated by calcine deposition. The current location of the stream is in response to the deposited material. The design of the restoration was based on the current location of the stream, with consideration of adjacent topography and the depositional and erosional characteristics of the stream, given the gradient and bed load. There has been erosion of hill slopes on the east side of the lower reach and there is a risk of continued erosion and undercutting, leading to stream degradation. As part of the restoration, a rock toe is to be placed so as to preclude migration of the stream eastward in a way that would continue this erosion problem. Between specific step pools the stream is left to follow its own course, except where short rock toes are installed to protect the adjacent slope. The abandoned segment of channel will be filled to reestablish a functioning floodplain in this area.

The realigned channel is in the lower part of Site B, where the exposures of calcine in the channel wall and data from the geotechnical investigation show the historic floodplain to have been covered with calcine; the historic floodplain in this area is approximately 60 feet in width and 400 feet long. The realigned channel segment would measure approximately 170 feet in length. The existing channel is located at the extreme eastern boundary of the historic floodplain and flows currently impinge upon the adjacent hillside resulting in erosion and potential instability of the hillside. With removal of the calcine from the historic floodplain and repositioning the channel more centrally in the historic floodplain, a more stable channel configuration would be provided that more closely resembles that which existed prior to the deposition of the calcine.

The stippling used to indicate the abandoned channel will be made consistent between sheet G-3 and L-3.

DFG-3 DFG refers to Site B access, discussed at pages 5 and 28. Two options for Site B access from Hicks Road were identified. Option 1 would require placement of a temporary culvert in Jacques Gulch and a temporary earthen ramp approximately 100 feet long by 24 feet wide at the top. Limited tree pruning may be required. Option 2 would require removal of approximately 10 mature trees, construction of a temporary earthen ramp, and installation of a temporary culvert across the stream. DFG recommends the first option based on less overall impact.

*Response:* SCVWD concurs with this recommendation and has selected Option 1 to provide access to Site B.

DFG-4 Referring to page 6 and the topics of staging, parking, and access, DFG requests that all staging/parking areas be located well outside of the drip-lines of trees to minimize root damage, and that this area be clearly marked to avoid inadvertent vehicle use or materials placement. If there are locations where avoidance of drip-lines is not practical, DFG requests SCVWD require temporary placement of structural soil to protect tree roots from damage and soil compaction. This structural soil should not be allowed to enter any water bodies and should be removed upon project completion.

*Response:* Site B has an extensive open area near the foot of the access ramp that would be suitable for staging and parking equipment. The contractor will be required to fence off trees at the drip line using construction fencing. If there are any locations where it is not practical to avoid areas within drip-lines, structural soil or other protection will be placed so as to protect the tree root systems. This protection will be removed at the completion of the project. An exception to the fencing requirement will be made where a tree rooted in native material is to be retained and where trees overhang calcine in a way that requires excavation within the drip line. Generally, such trees are rooted below the calcine. The calcine will be carefully removed and the pre-calcine soil surface identified and restored. If appropriate, additional soil will be placed on the site.

DFG-5 DFG refers to pages 7 and 24 with regard to plant surveys and requests information on how many surveys were conducted and when. The department also wants to know if it was a normal water year, and whether SCVWD plans any additional surveys prior to construction.

*Response:* Three protocol-level plant surveys, coinciding with the blooming periods of all 17 potentially occurring plants, were conducted on February 15, April 10, and June 6, 2006 by botanists who have experience with the rare plant species that could occur in the area. The surveys followed the protocol for plant surveys described in CNPS 2001, CDFG 2000, and USFWS 1996.

Rainfall in both the 2005 and 2006 seasons was an above normal, being 23.08 inches and 22.91 inches, respectively. San Jose's annual average rainfall is 15.08 inches.

One rare plant species was observed, the Loma Prieta hoita (*Hoita strobilina*, CNPS List 1B). Approximately three stands of this perennial herb are growing along one of the steep calcine streambanks in Site B.

Prior to construction, the Loma Prieta hoita will be salvaged. The hoita will be replanted once construction is complete. In addition to the plants, seeds will be collected and propagated as well, if feasible. There are no plans for additional plant surveys.

DFG-6 DFG references pages 7, 26, and 27 with regard to the San Francisco dusky-footed woodrat and notes that the USFWS no longer maintains a list of Species of Concern and that the species is solely a DFG Special of Special Concern. DFG requests SCVWD work with DFG staff to establish buffers to avoid and protect woodrat nests, and to identify timing and methodology for such work. Dismantling and relocation of nests should be a last resort.

*Response:* SCVWD will work with DFG staff to achieve this purpose. Under Mitigation Measure Bio-2 of the IS/MND, woodrat stick nests are to be flagged and avoided or removed where disturbance is unavoidable.

DFG-7 DFG cites pages 7 and 26 with regard to the California red-legged frog and frog surveys and notes that the IS/MND identifies the frog as a federally threatened species. DFG points out that the species is also a DFG Species of Special Concern. DFG requests clarification as to whether SCVWD plans to update the surveys, which were conducted in 2006, as protocol surveys for California red-legged frog are typically valid for two years. DFG notes that under the terms of a Streambed Alteration Agreement (SAA) periodic cursory surveys for the frog will be required prior to and during construction.

Response: Comments noted. The IS/MND has been revised as shown below. (Note, pages may have changed slightly due to insertions and deletions):

*Page 7:*

Wildlife in the project area include species common to oak woodlands. The area is within the historic range of the California red legged frog (CRLF) and the California tiger salamander (CTS). An assessment of habitat was conducted for both species. The assessment determined that the area is not suitable habitat for CTS but is suitable for CRLF. A protocol survey for CRLF was conducted, no CRLF were observed. Jacques Gulch is not believed to be suitable breeding habitat for CRLF due to high water flows during the winter, the presence of predatory fish, and the negative survey findings. However, Jacques Gulch does provide adequate dispersal habitat for CRLF. SCVWD is working USFWS to further discuss the protocol surveys.

*Page 26:*

**California red-legged frog (Rana aurora draytonii), USFWS Threatened, CDFG CSC**

The CRLF Habitat Assessment for Jacques Gulch (WRA, 2005a) concluded that there was potential CRLF breeding habitat in the westernmost portion of Site A, where a spring provided intermittent aquatic habitat, as well as Almaden Reservoir. Surveys were initiated following the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS, 2005) in the summer of 2005 and completed in July 2006. Jacques Gulch is not believed to be suitable breeding habitat for CRLF due to high water flows during the winter, the presence of predatory fish, and the negative survey findings. However, Jacques Gulch does provide adequate dispersal habitat for CRLF. SCVWD is working USFWS to further discuss the protocol surveys.

*Page 28:*

**Bio-3 Erect exclusion fencing and monitor for previously undetected species.** If required by the U.S. Fish and Wildlife Service or the California Department of Fish and Game, an exclusion fence shall be erected around the perimeter of the construction area to prevent species from entering the construction site, and a construction monitor shall be present during ground clearing activities to remove any wildlife species found within the fenced area. Preconstruction and cursory surveys will be done in the project area in order to detect sensitive herpetofauna. A construction monitor will also be present during ground clearing activities to remove any wildlife species found within the fenced area. If a CRLF is observed in the construction area, relocation of the species to a pre-approved area would be permitted by a USFWS-approved biologist with agency correspondence.

DFG-8 DFG refers to page 26 and the foothill yellow-legged frog, and notes that it is listed only by the DFG and no longer by USFWS. DFG also states that pre-construction and during-construction cursory surveys for the frog will be required.

*Response:* Comment noted. This section has been revised and now reads:

**Bio-3 Erect exclusion fencing and monitor for previously undetected species.** If required by the U.S. Fish and Wildlife Service or the California Department of Fish and Game, an exclusion fence shall be erected around the perimeter of the construction area to prevent species from entering the construction site, and a construction monitor shall be present during ground clearing activities to remove any wildlife species found within the fenced area. Preconstruction and cursory surveys will be done in the project area in order to detect sensitive herpetofauna. A construction monitor will also be present during ground clearing activities to remove any wildlife species found within the fenced area. If a foothill yellow-legged frog is observed in the construction area, relocation of the species to a pre-approved area would be permitted by a DFG-approved biologist with agency correspondence.

~~The status of many of the species mentioned in the report is a reflection of the time at which the report was written. Preconstruction and cursory surveys will be conducted for the Foothill Yellow-legged Frog.~~

DFG-9 DFG, referring to page 26, notes that western pond turtle, California horned lizard, and silvery legless lizard are DFG Species of Special Concern and cursory surveys for these species would be required before and during construction.

*Response:* Comment noted. This section has been revised and now reads:

**Bio-3 Erect exclusion fencing and monitor for previously undetected species.** If required by the U.S. Fish and Wildlife Service or the California Department of Fish and Game, an exclusion fence shall be erected around the perimeter of the construction area to prevent species from entering the construction site, and a construction monitor shall be present during ground clearing activities to remove any wildlife species found within the fenced area. Preconstruction and cursory surveys will be done in the ~~P~~project Aarea in order to detect sensitive herpetofauna. A construction monitor will also be present during ground clearing activities to remove any wildlife species found within the fenced area. If a western pond turtle, California horned lizard, or silvery legless lizard is observed in the construction area, relocation of the species to a pre-approved area would be permitted by a DFG-approved biologist with agency correspondence.

~~Cursory surveys will be performed for all sensitive herpetofauna that have the potential to occur in or near the Project Area before and during construction.~~

DFG-10 Referring to page 27 with regard to special-status bats, DFG requests information on how Mitigation Measure Bio-1 would be implemented in terms of methods to discourage bats from establishing maternity roosts, and proposed methods of bat relocation if required. DFG also requests information on buffers that SCVWD believes would be appropriate to protect bats from noise and other impacts. In addition, DFG requests additional mitigation such as placement of bat boxes in and around the project area to provide alternative habitat.

*Response:* This section has been revised and now reads:

**Bio-1 Perform bat surveys~~ and exclude bats from establishing roosts~~.** Potential bat roosts could occur as cavities in the large sycamores at the lower portion of Site B. No large trees are expected to be removed during construction practices; however, work conducted near the large trees in the ~~P~~project Aarea has the potential to disturb potential bat roosts.

If work is to take place during months when bats may be breeding (April through August) or hibernating (November through March), ~~If construction activities occur between November and August,~~ a bat survey shall be conducted. Surveys shall be conducted in late April or early May, when bats are establishing maternity roosts but before the females give birth. If bats are detected, three options may be available. The first and preferred option is to avoid disturbances near the tree (a minimum 100 foot buffer) until after the breeding period has ended but prior to the hibernation period (September through October). The second option would be to permit the encroachment on the 100 foot buffer by construction activities, but under the supervision of a biological monitor. If the monitor observes bats leaving the roost site during construction activities, then all work near the tree will be halted and the appropriate buffer would be reinstated. The third option, exclusion of bats, should only be done as a last resort. The nature of the tree cavities, the rugged terrain and the extensive tree height may prove difficult for the installation of bat exclusion devices. Exclusion devices may include plastic flaps, screening or polypropylene netting of ¼-inch mesh or a short length of PVC pipe. Exclusion devices will be removed upon completion of construction activities.

DFG-11 *Referring to pages 27 and A-7 regarding vegetation removal,* DFG *requests affirmation* that no trees will be removed solely to prevent migratory bird nesting, and it should be made clear that any tree removal will be limited to that necessary for the removal of calcine. DFG further notes that any migratory bird nesting will need to be addressed by avoidance of activities within buffers appropriate to the species.

*Response:* This section has been revised and now reads

Since raptors and other birds may potentially nest within the trees, shrubs and grassland that occur in and adjacent to Sites A and B, there is a potential for construction-related impacts to nesting birds. The Migratory Bird Treaty Act of 1918 protects most birds in the United States, including non-status species. Under this legislation, destroying active nests, eggs, and young is illegal. If construction activities occur between March 1 and August 31, the proposed project could result in destruction of active nests, eggs, or young and would be considered a significant impact. Implementation of the following District BMPs would reduce this impact to a less than significant level.

- BI-8, Migratory Bird Surveys
- BI-9, Migratory Bird Nesting Prevention – Vegetation Clearing

Vegetation removal will be limited to those areas where removal is necessary for the excavation and removal of calcine. No trees shall be removed solely to prevent migratory bird nesting. Breeding bird surveys will be required before the removal of any vegetation in the project area during the breeding season. Appropriate buffers will be established for any active nest found within the project area.

DFG-12 Referring to page 28 with regard to mitigation planning for the removal and transplanting of Loma Prieta hoita, DFG notes that the monitoring program presented is for three years. DFG requests justification for this period and suggests consideration *of a longer monitoring program of* 5 to 10 years, and that this be part of a greater Mitigation and Monitoring Plan for all planted vegetation.

*Response:* This section now reads:

**Bio-4 Remove and salvage Loma Prieta hoita.** ~~A m~~Mitigation ~~plan~~ for the Loma Prieta hoita shall be included in the Riparian Mitigation and Monitoring Plan ~~shall be~~ prepared as part of the Streambed Alteration Agreement application for CDFG. This plan shall include transplanting techniques, a monitoring program acceptable to DFG, performance criteria and contingency propagation measures to ensure that a stand of Loma Prieta hoita is restored within the project area. After removal, the plants shall be held in a nursery until the excavation and grading of the project area is complete. After construction, the plants shall be replanted in a shaded understory area in Site B. A contingency plan involving collection of ripe seeds from the plants shall ensure that any mortality of transplanted individuals can be compensated with planting of the collected seeds. In order to ensure viable seed is available for collection, the District shall install exclusionary fencing around the plants during the flowering period to minimize browsing by deer.

DFG-13 Referring to pages 28 and A-6 regarding relocation of aquatic vertebrates, DFG *states that it will include a condition in the SAA that specifically requires relocation of* all native aquatic vertebrates, unless a valid reason against this activity can be provided to DFG staff.

*Response:* Comment noted.

DFG-14 Referring to pages 28 and 29 regarding tree removal not associated with access routes, DFG requests identification of any trees that would need to be removed (excluding those related to site access) during the project. Specifically, they request information on the number, type, and diameter at breast height of these trees.

*Response:* The first paragraph on page 29 has been revised and now reads:

Following calcine removal, riparian trees and shrubs would be planted in all suitable locations. Initial planting density would be designed to allow for seedling mortality and to produce a mature canopy similar to adjacent areas unaffected by calcine areas. Removal of calcine and grading of the stream channel would also require the removal of ~~some oak~~eleven trees that are rooted in the calcine (Table 4.4.1). Individuals of ~~blue oak~~arroyo willow, California bay~~valley oak~~, and coast live oak would be affected. These individuals are relatively young (they have grown since the calcine was deposited) and are not of substantial quality due to their poor substrate. Some trimming of canopy would be necessary to provide access for excavation equipment. Calcine removal adjacent to large trees would avoid root and trunk damage, however, mortality of some large trees rooted below calcine is expected. Although they do provide habitat for small birds, they would be replaced at a level that is greater than those removed. Additionally, mortality of an unknown number of riparian and oak and bay trees that are rooted in native soils below calcine can be expected. Planting in subsequent years following initial restoration would provide an opportunity to replace these trees.

**Table 4.4-1. Trees Impacted by Jacques Gulch Restoration Project**

| ID | Species | Species | DBH (in) |
|---|---|---|---|
| **Site A** | | | |
| 45 | Salix | arroyo willow | 8 |
| 46 | Salix | arroyo willow | 6 |
| 50 | Salix | arroyo willow | 8 |
| 64 | Salix | arroyo willow | 20 |
| **Site B** | | | |
| 110 | UmCa | Calif. bay | 8 |
| 134 | UmCa | Calif. bay | 4 |
| 158 | UmCa | Calif. bay | 6 |
| 111 | UmCa | Calif. bay | 8 |
| 133 | QuAg | coast live oak | 5 |
| 136 | QuAg | coast live oak | 7 |
| 137 | UmCa | Calif. bay | 4 |

DFG-15 Referring to pages 29 and 40 with regard to seasonal wetland creation, DFG notes that a small seasonal wetland is included in the plan for Site A. It is also noted that the IS/MND states that wetlands have the potential to increase mercury methylization due to residual calcine in the watershed. DFG requests further analysis in determining the likelihood of an increase in mercury methylization from the created wetland, and that SCVWD evaluate whether the negative impacts to wildlife of this source of mercury methylization outweigh the habitat benefits of a seasonal wetland where one does not currently exist.

*Response:* The area of concern is a short segment of overflow channel in Site A. Creating or facilitating establishment of a seasonal wetland is no longer planned. The overflow channel in Site A will be designed to not pond water and therefore should not produce inundated or saturated conditions that would support wetland plants. It will be designed to flow only during a five-year or greater storm event. In addition, it will be designed at an elevation relative to the main channel and with an outlet weir that will not result in ponding or saturated soil. Item c) on page 29 now reads:

c): The excavation of calcine and regrading of the stream channel would temporarily affect waters of the U.S. under Section 404 of the Clean Water Act. The U.S. Army Corps of Engineers has jurisdiction over this area and typically requires a 1:1 mitigation for impacted waters. Since this is a restoration project and the stream would be returned to a more natural state with no reduction in length (in fact the length may increase due to channel realignment), no mitigation is required. ~~Although there were no wetlands found onsite, the planting plan calls for the establishment of a small seasonal wetland along a terrace adjacent to the stream in Site A. This would enhance the functions and values of the existing stream corridor by providing additional native plant habitat, providing improved habitat for reptiles, amphibians, insects, and birds, and provide flood control during high water flow.~~

The second full paragraph on page 40 now reads:

Mercury can exist in different forms: elemental or metallic mercury, inorganic mercury (mercury salts) and organic mercury. Mercury in the atmosphere is predominantly elemental mercury vapor and inorganic mercury; in water, soil, plants and animals, the primary forms are inorganic mercury and organic mercury. Methylmercury is the mercury compound of greatest concern in the environment, due to its prevalence, bioaccumulation potential and toxicity. A concern ~~has arisen regarding~~ would be the presence of residual calcine in the restored watershed contributing to the formation of methylmercury ~~in the restored~~ if wetlands were created or established.~~and thus leading to adverse impacts on wildlife.~~ However, no wetlands will be constructed as part of the restoration project. The one small area where a wetland could form will be graded so as to prevent creation of a seasonal wetland. ~~Therefore, the potential for restored wetlands to increase mercury methylization is possible.~~

DFG-16 DFG notes that the IS/MND does not mention the potential for the presence of burrowing owls in the project vicinity and requests information on the presence of existing rodent burrows and other habitat characteristics that may indicate a potential presence of the owls. If habitat characteristics exist, DFG suggests conducting burrowing owl surveys according to DFG guidelines.

*Response:* Two new paragraphs have been added to page 27. Beginning at paragraph three, the IS/MND now reads:

Since raptors and other birds may potentially nest within the trees, shrubs and grassland that occur in and adjacent to Sites A and B, there is a potential for construction-related impacts to nesting birds. The Migratory Bird Treaty Act of 1918 protects most birds in the United States, including non-status species. Under this legislation, destroying active nests, eggs, and young is illegal. If construction activities occur between March 1 and August 31, the proposed project could result in destruction of active nests, eggs, or young and would be considered a significant impact. Implementation of the following District BMPs would reduce this impact to a less than significant level.

- BI-8, Migratory Bird Surveys
- BI-9, Migratory Bird Nesting Prevention – Vegetation Clearing

(See Appendix A for details)

Vegetation removal will be limited to those areas where removal is necessary for the excavation and removal of calcine. No trees shall be removed solely to prevent migratory bird nesting. Breeding bird surveys will be required before the removal of any vegetation in the project area during the breeding season. Appropriate buffers will be established for any active nest found within the project area.

Burrowing owls usually are associated with the burrows of the California ground squirrel *(Thomomys bottae).* No ground squirrel burrows were observed in or near the project area. Typical habitat for this species consists of open areas with friable soils. The project area contains neither of these habitat characteristics. In addition, there are no CDFG CNDDB records for this species in the Santa Teresa USGS quadrangle. As a result, burrowing owls are not expected to occur in the project area.

## California Department of Transportation (DOT) Letter, May 14, 2008

DOT-1 The Department notes that any work requiring movement of oversized or excessive load vehicles on State roadways requires a transportation permit from the Department. State routes (SRs) in the vicinity to which this requirement would apply include US 101, SR 85, and SR 17.

*Response:* Comment noted. The contractor for the project would be required to obtain all necessary permits for any oversized or excessive load vehicles traveling on State Routes.

## County of Santa Clara Parks and Recreation Department (SCCPRD) Letter, June 12, 2008

SCCPRD-1 The County states that a license has been secured by SCVWD to implement project actions and mitigation measure on County park property.

Comment noted. The following is added to Table 1-1 on page 3 of the IS/MND:

| Agency | Permit/Review Required |
|---|---|
| County of Santa Clara | License to implement project on park property (executed May 11, 2005) |

SCCPRD-2 The County requests that Project Objectives (page 4, Section 2.1) be expanded to include the consent decree under which the project is being implemented, and that meeting the objectives in the "Almaden Quicksilver Restoration Plan and Environmental Assessment" (January 4, 2005) and implementing the plan would comply with the consent decree. The County also requests that the role of USFWS and CDFG be noted and the role of the IS/MND in regard to environmental review.

*Response:* SCVWD concurs and the text of Section 2.1 is modified as shown below:

The proposed Jacques Gulch Restoration Project is intended to fulfill District Board Ends Policies E-3.1 and E-3.2. These policies provide direction to implement mitigation commitments, identify mitigation banking opportunities that emphasize environmental benefits, and identify potential environmental enhancement opportunities for Board approval. The proposed project ~~is~~will be designed to fulfill the requirements of a consent decree entered into by the SCVWD, the County of Santa Clara, and other parties. Specifically, the project would satisfy that part of the consent decree requiring restoration of a part of Jacques Gulch. The consent decree's requirements are embodied in the Almaden Quicksilver Restoration Plan and Environmental Assessment (RP/EA) (January 4, 2005), which was prepared by the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

~~Accordingly, t~~The following project objectives have been identified for the proposed Project:

Restore stream sediment and lotic/riparian habitat at two discrete sites of significant releases known as Jacques Gulch in accordance with:

- Almaden Quicksilver Restoration Plan and Environmental Assessment – Restoration of the area known as Jacques Gulch will be conducted in order to comply with the consent decree. (United States and State of California v. County of Santa Clara et al., No. 05-CV-03073-PVT)

The RP/EA satisfied the requirements of both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Draft IS/MND prepared by the SCVWD provides project-level environmental review of the project and associated mitigation measures.

SCCPRD-3 With regard to the Project Scope of Work discussed in the IS/MND (Section 2.3, page 4 ff), The County feels that vegetation used in watershed restoration should be from plant stock in the same watershed, citing the RP/EA, which states "where possible, plantings will be from seeds collected from plants on-site and started at a nursery in the year before project construction." The County also requests that the Draft IS/MND should provide for post-construction monitoring and replanting, as provided in the RP/EA, which is up to three years following construction completion.

*Response:* To the extent feasible, plant material that can be used in the restoration planting will be salvaged and used in the restoration. However, the types of vegetation to restore the stream banks and adjacent land have been largely obliterated by the calcine flows and have not reestablished on the calcine. New plant material of the type that will grow in the restored project area will be required. The SCVWD will collect seeds and cuttings where appropriate and available to start a nursery stock for the replanting program. This will likely need to be supplemented with native plant materials that are suitable for the site, even if such materials are not watershed-specific.

In the discussion of biological impacts, page 29, paragraph 2, it is stated that a planting plan would be prepared as part of the Mitigation Monitoring Plan that would be required by CDFG, USACE, and RWQCB. The plan will describe the performance criteria, including survival and monitoring. Per the RP/EA, monitoring would be for three years after completion of construction. For clarity, in Section 2.3, at page 6, paragraph 4, is amended as follows:

Maintenance of the project area would be limited to activities associated with vegetation management practices during the establishment period for planted native species. Measures would be developed to evaluate and ensure establishment of the newly planted vegetation. A monitoring approach acceptable to resource agencies would be identified to document the success of vegetation establishment. The District proposes to monitor vegetation success for three years, as specified in the RP/EA, replacing vegetation as necessary to meet the performance criteria established in conjunction with the regulatory agencies.

SCCPRD-4 Of the two options for access to Site B from Hicks Road, the County favors Option 1, which would not require the removal of a number of trees, as would be the case with Option 2. The comment further notes that removal of some protected trees and the County's Tree Preservation and Removal Ordinance would require a permit from the County Planning Department. The County requests more information on the type and source of plant materials to be used in the restoration and reiterates the request that they be from within the watershed and that seeds from these plants be started in a nursery a year before construction.

*Response:* SCVWD concurs with the preference for Option 1 for access to Site B. See Comment and Response DFG-3 also. Everyone expressing a preference prefers Option 1. With regard to source material for replanting after construction, see Comment and Response SCCPRD-3. With the exception of one willow, as shown on the table provided in Response DFG-14, none of the trees meet the size criteria of the tree ordinance. This is further discussed in Response SCCPRD-11.

SCCPRD-5 The County notes that staging and parking areas for construction are subject to County approval prior to construction. The County further notes that, per the terms of the License for Restoration of Mining Sites, SCVWD is to invite the County to pre-construction, progress, and project monitoring inspections meetings and is to assist the SCVWD in the project final construction inspection.

*Response:* DFG has set forth a number of parameters for staging and parking areas and the protection of trees (See Comment and Response DFG-4). These requirements will be part of the Streambed Alteration Agreement to be obtained from DFG prior to construction. The contractor will designate parking and staging areas and will fence off areas to be protected. The County will be invited to review and concur with the sites that have been selected per State requirements. SCVWD has worked and will continue to work closely with the County on the design, execution, and monitoring of all phases of the project. The County will be invited to all meetings of significance affecting project execution and County property.

SCCPRD-6 The County makes corrections to item numbers 6, 7, and 10 on page 13.

*Response:* Corrections on page 13 are shown below.

6. General Plan Designation: ~~Agricultural~~Regional Park, Existing
7. Zoning: ~~Agricultural~~Hillside
10 Other public agencies whose approval is required: U S. Army Corps of Engineers: California Regional Water Quality Control Board, San Francisco Bay Region; California Department of Fish and Game; National Marine Fisheries Service; County of Santa Clara

SCCPRD-7 The County notes that review by DFG and USFWS will be required and suggests these agencies be consulted regarding mitigation measures for bats, nesting migratory birds, nesting raptors, and dusky-footed woodrats. The County states it will defer to the regulatory agencies' recommendations on mitigation measures.

*Response:* Comment noted. Please see Comments and Responses DFG-4 through DFG-15, which address requirements for the species noted in the comment.

SCCPRD-8 The County recommends that a qualified bat biologist conduct bat surveys included in the project mitigation measures and that rather than prevent bats from establishing maternity roost, these sites be avoided and left undisturbed until after the breeding period has ended.

*Response:* SCVWD will coordinate with DFG on how best to mitigate and manage potential impacts to bats. Please see Comment and Response DFG-10, which addresses impacts to bats and impact mitigation.

SCCPRD-9 The County notes that removal or trimming of trees could impact nesting birds if they are present, resulting in the loss of nests, eggs, or individuals. The County feels that insufficient mitigation and protection is afforded by Best Management Practices BMP B1-8 and BMP B1-9, and recommends other mitigation measures be added. The County suggests that BMP B1-8 be modified to say that inactive nests not be removed. Additional mitigation measures are recommended and spelled out in some detail. [These are not repeated here, but can be found in the attached DFG Comment Letter, under Comment DFG-9.]

*Response:* SCVWD does not agree that BMP B1-8 needs to be modified to preclude the removal of inactive nests (except raptor nests). Nests are frequently not reused year-to-year. If an inactive nest is found and removed, breeding birds will establish a new nest at a location of their choosing. Removal of an inactive nest would not adversely affect subsequent nesting success. The County's suggested additional mitigation measures regarding birds are noted. However, implicit in County's comment is the recognition that DFG will establish temporal and geographic parameters with regard to birds within which construction can occur. These parameters will include time-of-year restrictions and distance-from-nest limitations, as deemed appropriate by DFG. Therefore, the County's recommendations are subsumed within the DFG approval process and are not adopted separately.

SCCPRD-10 In addition to the mitigation measure in the IS/MND, the County recommends other mitigation measures with regard to potential impacts on the San Francisco dusky-footed woodrat. These are to erect fencing around woodrat houses within 25 feet of construction activities and, if disturbance is unavoidable, to consult with DFG for approval to trap occupants, dismantle the house, construct a new house from salvaged materials, and release the occupant into the new house.

*Response:* DFG has requested that SCVWD work with the agency to establish methods to protect woodrats and woodrat houses. The SCVWD has agreed to do this. Please see Comment and Response DFG-6. The specific methods and parameters to be used will be determined in consultation between SCVWD and DFG. The County's comment is noted.

SCCPRD-11 The County recommends a tree preservation plan be prepared and the mitigation measures include a tree assessment conducted by a certified arborist experienced in assessing construction impacts to trees. The County would like a copy of any such plan and assessment. It is noted that removal of any trees even within the calcine may be subject to the tree protection and removal policy in the Santa Clara County Tree Preservation Ordinance.

*Response:* Trees within the calcine area that are rooted in native soil beneath the calcine will be protected and calcine will be hand excavated so as to protect the tree and enhance its chance of survival. Trees rooted in calcine cannot be preserved, as they will be removed when the calcine is removed. Trees outside of the construction area will be undisturbed. Within the construction zone, trees that are to be protected from disturbance will be fenced off from vehicle access (please see Comment and Response DFG-4). Together, these constitute a plan to preserve trees on and around the construction site. An additional plan is redundant and not needed. Likewise, an assessment of trees by an arborist is not required, as the trees will be either removed or protected, as indicated above and in Response DFG-4. The health of the tree, *per se*, would not affect its fate. Therefore, an assessment would serve no discernable purpose that would contribute to the success of tree protection and survival.

The County noted in Comment SCCPRD-6 that the zoning for the project area is "Hillside." The County Tree Preservation Ordinance states that tree removal in Agricultural and Hillside Zoning Districts is governed by §C16-5 and §C16-6 of the County Ordinance Code. In particular, §C16-6 applies to the Hillside Zone. Sec. C16-6(a) provides as a matter of right: "Parcels greater than three acres: Tree removal provided the yield is not more than ten percent of trees over 37.7 inches circumference (12 inches or more in diameter) measured 4.5 feet above the ground per year on any parcel, together with contiguous parcels under the same ownership." Based on this, which allows removal of no more than ten percent of trees over 12 inches DBH, and given that only one tree to be removed meets the 12-inch DBH standard, the SCVWD does not believe that a tree removal permit would be required. However, if the County feels a tree removal permit is required, one will be obtained.

SCCPRD-12 The County recommends that Native American representatives identified in a letter from the Native American Heritage Commission be informed of the project.

*Response*: A letter was sent to the Native American Heritage Commission (NAHC) on April 27, 2006. It described the project and provided a map of the project area. The letter included a request for a listing of local, interested Native American representatives and information on traditional or sacred lands within the project area and vicinity. The NAHC sent a response on May 5, 2006, which stated that a "search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area." The NAHC response included a list of individuals to solicit comment on the project's environmental document, if desired. Because of the NAHC response reporting no known cultural resource and the fact that the project is to remove calcine down only to the original pre-calcine grade, it was felt that additional contacts were not necessary. In addition, two mitigation measures are incorporated into the project that reduce potential impacts to a less than significant level:

- Cult-1a: Stop earthwork if unknown historic or prehistoric resources are detected
- Cult-2a: Discovery of Native American Human Remains. In the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code should be followed.

However, as a result of the County's comment, letters have been sent to the individuals named by the NAHC and follow-up telephone calls will be made.

SCCPRD-13 The County notes that what is called the Multiple Species Habitat Conservation Plan (MSHCP) in the IS/MND is now called the Santa Clara County Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) (HCP/NCCP). The comment also notes that the proposed project objectives and mitigation measures should be consistent with the HCP/NCCP.

*Response:* The IS/MND text is amended at page 50 to read as follows:

The proposed project would occur in an area covered by a habitat conservation plan that is in preparation. This is the Santa Clara County Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) (HCP/NCCP) ~~a Multiple Species Habitat Conservation Plan (MSHCP)~~. The HCP/NCCP ~~MSHCP~~ addresses the District's and partners' activities and responsibilities under the federal Endangered Species Act (ESA) of 1973 as amended (16 USC 1531-1544). The District, in preparing this MSHCP, is requesting an incidental take statement under Section 10(a) of the ESA to conduct flood protection, water supply, and related activities within the District's operational area. The HCP/NCCP, ~~MSHCP~~ when completed, will address~~es~~ projects, activities, and the process the District will use to evaluate the potential for take of covered species. The project site contains at least one species on the Interim Projects Species List: Loma Prieta hoita (*Hoita strobilina* CNPS List 1B) The District is required to notify Resource Agencies to request comments regarding recommended mitigation measures or project alternatives that would help achieve the conservation objectives of the pending HCP/NCCP~~MSHCP~~. Conservation objectives and mitigation measures for Loma Prieta hoita will be incorporated into the project plan as they are made available. The project is also part of the Almaden Quicksilver Restoration Plan established with the USFWS and the CDFG. As this project has been designed according to the Almaden Quicksilver Restoration Plan, it would be in compliance with this plan. No impacts would occur.

SCCPRD-14 The County states that it appreciates the collaborative and cooperative approach undertaken to implement the Jacques Gulch Restoration project and looks forward to receiving subsequent documents and participating in future discussion.

*Response:* The SCVWD likewise appreciates the cooperation and interest of the County in making the project successful and in providing comments on the IS/MND.

Comment letters received from the Department of Toxic Substances Control, the California Department of Fish and Game, the California Department of Transportation, and the Santa Clara County Parks and Recreation Department are appended after this page.

# Comment Set DTSC
# Department of Toxic Substances Control

Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Linda S. Adams
Secretary for
nvironmental Protection

Arnold Schwarzenegger
Governor

May 29, 2008

Mr. Ryan Heacock
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118-3686

Dear Ms. Heacock:

Thank you for the opportunity to comment on the Draft Initial Study and Mitigated Negative Declaration for the Jacques Gulch Restoration Project ("Project") (SCH # 2008042128). As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a Responsible Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project under the California Environmental Quality Act (CEQA) adequately addresses any remediation activities pertaining to releases of hazardous substances.

The Draft Initial Study and Mitigated Negative Declaration (IS/MND) states that Almaden Quicksilver County Park was the site of mercury mining and ore processing operations from around 1845 until the 1970's. Mercury-contaminated waste materials known as calcines were generated as a result of the mining and processing operations. The Project involves removal of calcines in the Jacques Gulch area of the Park and placement of these calcines in an existing mine waste consolidation site at Mine Hill, also in the Park.

**DTSC-1**

Based on review of the IS/MND, DTSC strongly recommends that the Project Description (Section 2) include additional background information about remediation of mercury mining wastes in the Park. This information should identify DTSC as the state agency overseeing the cleanup of the mercury contamination, and state that a Remedial Action Plan (RAP) for the Park was approved by DTSC in 1994. Areas in the Park that have been already remediated should be identified, and there should be a summary describing how the remediation work was done. The Explanation of Significant Differences (ESD) issued by DTSC in 2006 should be discussed, since the ESD describes the remediation that is needed in the Jacques Gulch area, which was not one of the areas included in the RAP.

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## Comment Set DTSC, cont.
## Department of Toxic Substances Control

Mr. Ryan Heacock
May 29, 2008
Page 2

DTSC also recommends that the Hazards and Hazardous Materials section (Section 4.7) be revised to include a discussion of the Remedial Design that will be prepared for the Project and approved by DTSC. Since the Remedial Design will describe how the remediation will be implemented, it is relevant to the analysis of the Project's environmental impacts under CEQA.

**DTSC-2**

If you have any questions or would like to schedule a meeting, please contact Allan Fone of my staff at (510)540-3836. Thank you in advance for your cooperation in this matter.

Sincerely,

Denise M. Tsuji, Unit Chief
North Coast Cleanup
Operations Branch

cc: Governor's Office of Planning and Research
State Clearinghouse
P. O. Box 3044
Sacramento, CA 95812-3044

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

# Comment Set DFG
# California Department of Fish and Game

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

May 23, 2008

Mr Ryan Heacock
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Dear Mr. Heacock:

Subject: Comments on Draft Initial Study/Mitigated Negative Declaration for the Jacques Gulch Restoration Project SCH # 2008042128, City of San Jose, Santa Clara County

This letter is to inform you that the Department of Fish and Game (DFG) has reviewed the Santa Clara Valley Water District's (SCVWD) draft Initial Study/Mitigated Negative Declaration (draft IS/MND) for the Jacques Gulch Restoration Project, SCH #2008042128. The project involves the removal of visible calcine followed by re-vegetation at two sites (Site A and Site B), located within Almaden Quicksilver County Park just upstream of Almaden Reservoir. Site A is located along Jacques Gulch at Hicks Road, immediately west of Alamitos Road. Site B is located along a tributary to Jacques Gulch, further west off Hicks Road.

**DFG-1**

__Pages 5 and 47 – Sediment retention basin:__ The draft IS/MND describes the development of a temporary sediment retention basin at the lower reach of Site A near Alamitos Road. The purpose of this sediment retention basin would be to store coarse sediments, including minor unconsolidated calcine residues that may be mobilized immediately after construction, while site vegetation is being established. It is unclear as to what the fate of this sediment retention basin will be once it is filled. It may be implied by the text on page 47 that sediments will be left in place, becoming part of Site A's lower reach channel as it develops toward a stable form and alignment. DFG requests that SCVWD clarify whether there is any plan to remove and dispose of these potentially contaminated sediments and, if not, to fully disclose the potential impacts to water quality in terms of mercury concentrations and the potential for dissolved mercury to continue to be transported downstream into Almaden Reservoir.

**DFG-2**

__Pages 5, L-3, and G-3 – Realignment of lower reach of Site B:__ The draft IS/MND states that after calcine removal at site B, the land would be graded and contoured to provide appropriate slope stability and floodplain function. The document indicates that the confined upper reach of Site B would be restored in its current alignment, while the wider lower reach would be realigned and located more centrally in the floodplain to minimize proximity to eroding hill slopes. DFG requests that SCVWD clarify whether the lower reach's current alignment corresponds to its historical alignment and, if so, why SCVWD feels the need to redirect the lower channel outside of its historical alignment. Streams generally align themselves and meander according to the topography, soils, and hydrologic conditions present in an area. Artificially redirecting this natural process typically results in failure and may lead to further degradation of the stream. DFG strongly discourages the practice of channel realignment outside of its historical context,

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## Comment Set DFG, cont.
## California Department of Fish and Game

Mr. Ryan Heacock
May 23, 2008
Page 2

particularly in an area characterized by otherwise relatively undisturbed open space. DFG requests disclosure and a clear justification from SCVWD for channel realignment, with a thorough analysis of potential costs and benefits to hydrology, water quality, and biological resources. In addition, DFG requests clarification of the fate of the abandoned portion of the channel, in which SCVWD can proceed with the realignment. **DFG-2 cont.**

Sheet L-3 in Figure 1-5 appears to show what would be the abandoned alignment of the portion of channel that is proposed to be realigned at Site B. However, the symbols in the legend on sheet G-3 do not necessarily correspond to this. Also, there appears to be a rock toe being placed along a portion of the eastern bank of the abandoned channel. This would not make sense if the channel is proposed to be filled DFG requests that SCVWD clarify with appropriate symbols what is proposed for the abandoned portion of the channel and ensure that it properly corresponds with what is described in the text of the document.

Pages 5 and 28 – Site access: The draft IS/MND describes two access alternatives to Site B. Site B Temporary Access. Option 1 requires the temporary placement of a culvert in Jacques Gulch and an earthen ramp measuring approximately 100 feet long by 24 feet wide, with some limited tree pruning. Site B Temporary Access, Option 2 requires the removal of approximately 10 trees (oak and bay ranging between 6 inches and 20 inches at diameter breast height) on the north side of Hicks Road to develop a temporary earthen ramp and placement of a culvert in Jacques Gulch DFG staff visited the project site in 2006 and participated in discussions regarding the two access options. DFG and other resource agency staff encouraged SCVWD to further investigate the feasibility of Option 2, with the assumption that impacts to trees would be restricted to pruning only, and that there may be the possibility of free-spanning Jacques Gulch for temporary access and avoiding dewatering. As Option 2 appears to require the removal of several trees as well as a culvert and dewatering in Jacques Gulch, this option does not avoid and minimize impacts as well as Option 1. Therefore, DFG recommends that SCVWD proceed with Option 1 for temporary access to Site B. **DFG-3**

Page 6 – Staging, parking, and access: DFG requests that all staging and parking areas be located well outside of the drip-lines of any trees to minimize damage to tree root systems. All staging and parking areas should be clearly marked to avoid vehicles and materials being inadvertently placed in the vicinity of tree root systems. DFG requests that all access routes be clearly marked and outside of the drip-lines of any trees wherever practicable. In locations where the complete avoidance of the drip-lines cannot be avoided, DFG requests that SCVWD temporarily place structural soil where appropriate along the access routes to protect tree root systems from damage and soil compaction, which may result from the repeated movement of vehicles back and forth along the access routes. Measures should be taken to ensure that no structural soil is allowed to slough off or be washed down into any water bodies All structural soil should be removed from the site at project completion. **DFG-4**

Pages 7 and 24 – Plant surveys: Text in the draft IS/MND implies that plant surveys may have been conducted in the project area. However, no information is provided that indicates how many plant surveys were conducted, when, and whether they were done during a normal water year. DFG requests this additional information regarding any plant surveys that were conducted for this project, and whether SCVWD plans to conduct any additional surveys prior to construction. **DFG-5**

# Comment Set DFG, cont.
# California Department of Fish and Game

Mr. Ryan Heacock
May 23, 2008
Page 3

**Pages 7, 26, and 27 – San Francisco dusky-footed woodrat:** The draft IS/MND identifies the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) as a U. S. Fish and Wildlife Service (USFWS) Species of Concern and a DFG Species of Special Concern. DFG would like to point out that the USFWS no longer maintains a list of Species of Concern, and that this species is solely a DFG Species of Special Concern. DFG-6

Mitigation Measure Bio-2 describes flagging and avoidance of woodrat stick nests. The measure also describes the possibility of dismantling the nests if disturbance is unavoidable. DFG requests that SCVWD work with DFG staff to establish appropriate buffers to avoid and protect woodrat nests from disturbance Nest dismantling and relocation should be a last resort, only after all efforts to avoid disturbance have been exhausted. These activities should be closely coordinated with DFG staff with regard to timing and methodology.

**Pages 7 and 26 – California red-legged frog:** The draft IS/MND identifies the California red-legged frog (*Rana aurora draytonii*) as a federally threatened species. DFG agrees with this and would like to point out that this species is also a DFG Species of Special Concern. DFG-7

**Pages 7 and 29 – California red-legged frog surveys:** The draft IS/MND states that surveys for California red-legged frog were conducted in 2005 according to USFWS 2005 protocols. Although no California red-legged frogs were detected during these surveys, SCVWD did identify potential breeding habitat in the westernmost portion of Site A, as well as at Almaden Reservoir. Protocol surveys for California red-legged frog are typically valid for a period of two years. DFG requests clarification as to whether SCVWD is planning to conduct an updated set of protocol surveys for this species prior to project construction. DFG will require periodic cursory surveys for California red-legged frog prior to and during construction as part of the Streambed Alteration Agreement (SAA).

**Page 26 – Foothill yellow-legged frog:** The draft IS/MND identifies the foothill yellow-legged frog (*Rana boylii*) as a USFWS Species of Concern. As mentioned above, the USFWS no longer maintains a list of Species of Concern, but this species is a DFG Species of Special Concern. DFG will require periodic cursory surveys for foothill yellow-legged frog prior to and during construction as part of the SAA process. DFG-8

**Page 26 – Special-status reptiles:** DFG would like to point out that the western pond turtle (*Clemmys marmorata*), California horned lizard (*Phrynosoma coronatum frontale*), and silvery legless lizard (*Anniella pulchra pulchra*) are all DFG Species of Special Concern DFG may require periodic cursory surveys for these species prior to and during construction as part of the SAA process. DFG-9

**Page 27 – Special-status bats:** The draft IS/MND identifies Mitigation Measure Bio-1 for performing bat surveys and excluding bats from establishing maternity roosts to avoid and minimize impacts to bats as a result of this project. The document also mentions that bats may be relocated in situations where impacts cannot be avoided. DFG requests disclosure on methods that would be proposed to discourage bats from establishing maternity roosts, and proposed methods of bat relocation. DFG also requests additional information on buffers that SCVWD believes would be appropriate to protect bats from impacts associated with noise and other activities. In addition, DFG requests that SCVWD provide additional mitigation measures, DFG-10

# Comment Set DFG, cont.
# California Department of Fish and Game

Mr. Ryan Heacock
May 23, 2008
Page 4

such as the placement of bat boxes in and around the project area, to provide alternative habitat to bats and to compensate for habitat loss that may result from any tree removal.

**DFG-10 cont.**

**Pages 27 and A-7 – Vegetation removal:** The draft IS/MND includes Best Management Practice (BMP) BI-9, which states that vegetation can be cleared and maintained to prevent migratory bird nesting. DFG requests that SCVWD affirm that no trees will be removed solely for the prevention of migratory bird nesting. It should be made clear in the document that any tree removal will be limited to those necessary for the removal of calcine deposits, and not merely to prevent migratory bird nesting issues. Any migratory bird nesting will need to be addressed with avoidance of activities within buffers appropriate for the species that are nesting Buffers for active nests should be a minimum of 50 to 75 feet for non-raptors and 250 feet for raptors (including burrowing owl [*Athene cunicularia*]), herons, and egrets.

**DFG-11**

**Page 28 – Monitoring program for special status plant:** The draft IS/MND includes Mitigation Measure Bio-4, which describes the development of a mitigation plan for the removal and transplanting of Loma Prieta hoita (*Hoita strobilina*) (CNPS List 1B). The measure describes a 3-year monitoring program for the transplanting and restoration of this species that will be impacted by the project. DFG requests that SCVWD provide justification for such a short monitoring program. Success criteria are unlikely to be met within such a short duration. DFG suggests that SCVWD consider a longer monitoring program (a minimum of 5 to 10 years) as part of a greater Mitigation and Monitoring Plan for all vegetation that will be planted as a result of this project.

**DFG-12**

**Pages 28 and A-6 – Relocation of native aquatic vertebrates:** The draft IS/MND includes BMP BI-2, which states that native aquatic vertebrates will be relocated at the discretion of a biologist from dewatered channels. DFG requests that SCVWD provide information describing situations where a biologist would recommend against relocation of native aquatic vertebrates. DFG will include a condition in the SAA that specifically requires relocation of all native aquatic vertebrates, unless a valid reason against this activity can be provided to DFG staff. Any deviation from this condition will need to be coordinated with DFG staff.

**DFG-13**

**Pages 28 and 29 – Tree removal not related to access routes:** In Figure 1-6, SCVWD provided a table which shows the number of trees that will need to be removed as a result of establishing an access route. However, the draft IS/MND does not appear to address the specific number, identity, and size of trees that may be impacted as a result of the calcine removal activities DFG requests that SCVWD disclose information pertaining to any trees that would need to be removed as a result of the project, not related to access. Specifically, DFG requests that SCVWD provide the number of trees expected to be removed, their identity, and diameter at breast height.

**DFG-14**

**Pages 29 and 40 – Seasonal wetland creation:** The draft IS/MND discusses the creation of a seasonal wetland along a terrace adjacent to the stream in Site A. While acknowledging that there are currently no wetlands on the project site, the document lists several ways in which wildlife habitat values may increase within the stream corridor as a result of the creation of this wetland However, the document also mentions the possibility that this newly created wetland may have the potential to increase mercury methylization due to the residual calcine in the watershed. DFG requests that SCVWD conduct further analysis in determining the likelihood of this increase in mercury methylization resulting from the created wetland. DFG requests that

**DFG-15**

## Comment Set DFG, cont.
## California Department of Fish and Game

Mr. Ryan Heacock
May 23, 2008
Page 5

SCVWD evaluate whether the negative impacts to wildlife associated with this additional source of mercury methylization may outweigh the wildlife habitat benefits provided by a seasonal wetland where one does not currently exist **DFG-15 cont.**

**DFG0002-16**

Other Issues: The draft IS/MND does not mention the potential for the presence of burrowing owl in the vicinity of the project site. DFG requests further information on the presence of existing rodent burrows and other appropriate habitat characteristics (rock piles, dirt berms) that may indicate the potential presence of this species. If those habitat characteristics do exist, DFG suggests that SCVWD conduct burrowing owl surveys according to the guidelines that are available on DFG's website, http://www.dfg ca.gov/wildlife/species/docs/boconsortium.pdf.

DFG appreciates the opportunity to comment on the SCVWD's draft IS/MND for the Jacques Gulch Restoration Project. DFG commends SCVWD for conducting this project which will provide many overall benefits to wildlife and water quality in the Jacques Gulch watershed and Almaden Reservoir. Questions regarding this letter and further coordination on this project should be directed to Ms. Tami Schane, Environmental Scientist, at (415) 831-4640; or Mr Greg Martinelli, Water Conservation Supervisor, at (707) 944-5570.

Sincerely,

Scott Wilson FOR
Charles Armor
Regional Manager
Bay Delta Region

cc: State Clearinghouse

Mr. Brian Wines
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street Suite 1400
Oakland CA 95612

National Marine Fisheries Service
Santa Rosa Office
777 Sonoma Avenue, Room 325
Santa Rosa, CA 95404

## Comment Set DOT
## California Department of Transportation

STATE OF CALIFORNIA BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

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May 14, 2008

SCL-085-6.14
SCL085176
SCH2008042128

Mr. Ryan Heacock
Santa Clara County Valley Water District
5750 Almaden Expressway
San José, CA 95118-3686

Dear Mr. Heacock:

**Jacques Gulch Restoration Project – Initial Study/Mitigated Negative Declaration (IS/MND)**

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. We have reviewed the IS/MND and have the following comments to offer.

**Transportation Permit**

Project work that requires movement of oversized or excessive load vehicles on State roadways, such as US 101, State Route (SR) 85 or SR 17 requires a transportation permit that is issued by the Department. To apply, a completed transportation permit application with the determined specific route(s) for the shipper to follow from origin to destination must be submitted to the address below. **DOT-1**

Office of Transportation Permits
California DOT Headquarters
P.O. Box 942874
Sacramento, CA 94274-0001

See the following website link for more information: http://www.dot.ca.gov/hq/traffops/permits/.

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,

Lisa Carboni

LISA CARBONI
District Branch Chief
Local Development – Intergovernmental Review

# Comment Set SCCPRD
# Santa Clara County Parks and Recreation Department

**County of Santa Clara**
Parks and Recreation Department

298 Garden Hill Drive
Los Gatos, California 95032-7669
(408) 355-2200 FAX 355-2290
Reservations (408) 355-2201
www.parkhere.org

June 12, 2008

Santa Clara Valley Water District
Attn: Ryan Heacock, Environmental Planner
5750 Almaden Expressway
San Jose, CA 95118-3686

**SUBJECT: Draft Initial Study and Mitigated Negative Declaration – Jacques Gulch Restoration Project (May 2008) Project No. 91854002**

Dear Mr. Heacock:

The Santa Clara County Parks and Recreation Department has reviewed the Draft Initial Study and Mitigated Negative Declaration (IS/MND) for the Jacques Gulch Restoration project and submits the following comments for the Santa Clara Valley Water District's consideration.

Santa Clara County Parks and Recreation Department (SCCPRD) is focused on potential impacts resulting from the Jacques Gulch Restoration project actions, including mitigations, on County parkland. Since the County of Santa Clara is named as a potential responsible party in the consent decree *(United States and State of California v. County of Santa Clara, et al., No 05-CV-03073-PVT)* along with the Santa Clara Valley Water District (SCVWD), the SCCPRD's intent is to ensure that the restoration actions and mitigations formulated for the project meet the objectives and approaches specified in the Almaden Quicksilver Restoration Plan and Environmental Assessment (January 4, 2005) and comply with the consent decree. Since the project is within Almaden Quicksilver County Park, our focus is also directed to maintaining opportunities for recreation and public access and protecting the natural resources.

**1.5 Interagency Collaboration and Regulatory Review**
Under Table 1-1, Summary of Agency Approvals, a License has already been secured by the SCVWD to implement any proposed project actions and mitigation measures on County park property at the areas delineated on the site maps pursuant to the Consent Decree. **SCCPRD-1**

2.1 Project Objectives
While the proposed Jacques Gulch Restoration Project is intended to fulfill District Board Ends Policies E-3.1 and E-3.2, it should also be noted that project is also intended to comply with the consent decree and meet the objectives of "The Almaden Quicksilver Restoration Plan and Environmental Assessment (January 4, 2005)" (RP/EA). **SCCPRD-2**

The project objectives noted in the Draft IS/MND are identified as specific objectives in the RP/EA. Furthermore, under Section 4.3.1.2, #2 Primary Restoration Alternative discussion of the RP/EA (Page 23), the plan states that, "all approaches will also provide for plantings certified by a biologist to attempt

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, Ken Yeager, Liz Kniss
County Executive: Peter Kutras Jr.

## Comment Set SCCPRD, cont.
## Santa Clara County Park and Recreation Department

**SCCPRD-2 cont.**

to maximize habitat value and vegetation that is likely to become self-sustaining." The specific objectives of the RP/EA are to restore stream sediments and lotic/riparian habitat at two discrete sites, one of which is Jacques Gulch. Meeting these specific objectives and implementation of the restoration plan would comply with the consent decree.

The Draft IS/MND should note that the RP/EA has been completed and issued by the U.S. Fish and Wildlife Service, on behalf of the Secretary of the Interior, and the California Department of Fish and Game, on behalf of the State of California to comply with January 4, 2005 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The RP/EA is intended to meet the requirements of National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). In accordance with the RP/EA, the Draft IS/MND represents additional environmental compliance needed prior to implementation of the project. It also provides project level assessment and mitigations that will meet restoration actions identified in the RP/EA.

**SCCPRD-3**

**2.3 Project Scope of Work -Construction Elements**
The Draft IS/MND states that following construction activities to take place at Site A and Site B, where the disturbed area would be vegetated using vegetation that would be consistent with that of similar drainages in the area, and would include riparian plant species along the drainage and upland species at higher elevations."

SCCPRD feels that the vegetation should be watershed specific using plant stock from the same watershed. In addition, under Section 4.3.1.2 #2 Primary Restoration Alternative: Jacques Gulch Restoration and Enhancement Project (Page 23), the RP/EA stipulates, "where possible, plantings will be from seeds collected from plants on-site and started at a nursery in the year before project construction." SCCPRD concurs with these stipulations, and recommends that they be included in the project mitigations.

The MND states that the vegetation would be maintained until re-established. The mitigation monitoring plan should specify maintenance measures, similar to those stipulated in the RP/EA, that will be taken to ensure that re-establishment is successful. The Draft IS/MND should also provide for post construction monitoring and replanting as stated in the same section of the RP/EA, where "monitoring and re-planting will be conducted as needed for up to three years following construction completion" (page 23).

**SCCPRD-4**

Two options are identified for providing temporary construction access to site B, including "Site B Temporary Access, Option 1 which may require limited tree pruning" while "Site B Temporary Access, Option 2 would require removal of ten (10) trees". Due to the significant impact to trees, which could be mitigated by avoidance under Option 1, SCCPRD would not support Option 2. Furthermore, many of the trees listed for removal in the *Jacques Gulch Conceptual Restoration Plan Alternative 1 Site B Temporary Access Plan Option 2* would be classified as "protected trees" under Santa Clara County Tree Preservation and Removal Ordinance (Ord. No. NS-1203-107, Division C16). Removal and, under some circumstances, trimming or pruning of protected trees would require a permit from Santa Clara County Planning Department.

The Draft MND states that, "Once grading of the project area is complete, the area will be planted with native trees and shrub species and hydro seeded with site appropriate native grass species". SCCPRD requests that SCVWD provided more detailed information regarding the type and source of plant materials. Trees, shrubs and native grasses should be watershed specific using plant stock from the same watershed, preferably from seeds collected from plants on-site and started in a nursery in the year before project construction, pursuant to the RP/EA.

## Comment Set SCCPRD, cont.
## Santa Clara County Park and Recreation Department

In accordance with the consent decree, the staging and parking areas for project construction are subject to County approval prior to the start of construction, under Recital 6(g) for the License for Restoration of Mining Sites. "Furthermore, District will invite County to the following meetings during the project construction and monitoring: (1) Pre-Construction meeting, (2) Progress Meetings, (3) Assist District in the Project Final Construction Inspection, and (4) Project Monitoring Inspection Meetings." SCCPRD-5

**Section 4 Environmental Evaluation**
Under background numbers 6, and 7 on page 13, the General Plan Designation and Zoning designations should be corrected to "Regional Park, Existing" and "Hillside" respectively. The County of Santa Clara should be included under "Other agencies whose approval is required" since permits and approvals may be required form County Departments in order to implement the project. SCCPRD-6

**4.4 Biological Resources**

SCCPRD notes that CDF&G and USFWS are being sent the IS/MND as part of the permit review process for project specific permits listed in Table 1-1 that may be required. SCCPRD suggests that these agencies also be consulted regarding the proposed mitigations measures and best management practices for bats, nesting migratory birds, nesting raptors and dusky footed woodrats. In our experience, these mitigations would be included, however, SCCPRD recognizes that their implementation may have an impact on the construction schedule which could result in impacts to public access and recreational use. Therefore, SCCPRD will defer to the regulatory agencies recommendations on mitigation measures listed under Bio-1, Bio-2, Bio-3, Bio-4 and B1-8 and B1-9. SCCPRD-7

**Mitigation Measures and Best Management Practices**
**Bio-1 Perform bat surveys and exclude bats from establishing roosts.** SCCPRD-8
"If construction activities occur between November and August, a bat survey shall be conducted. Surveys shall be conducted in late April or early May". SCCPRD recommends a qualified bat biologist conduct the bat surveys included in the mitigation measure. SCCPRD recommends that rather than excluding bats from establishing maternity roosts, that roosting sites be avoided and left undisturbed until after the breeding period has ended. If work needs to commence during the bat breeding season, than CDFG should be consulted.

Implementation of the project, including the removal or trimming of shrubs or trees, could impact nesting birds, if present. During the migratory bird nesting season (March 1 - July 31), as a general rule, or raptor nesting season, which in this part of California is February 1-July 31. As a general rule, implementation of project activities could result in loss of nests, eggs, or individuals. SCCPRD does not feel sufficient mitigations for potential disturbances to raptors or other nesting birds are provided under Best Management Practices (BMP B1-8, BMP B1-9). and recommends that mitigation measures be added under Biological Resources. SCCPRD-9

**BMP B1-8: Migratory bird surveys will be performed prior to any project-related activity that could pose the potential to affect migratory birds. Inactive bird nests may be removed, with the exception of raptor nests. No birds, nests with eggs, or nests with hatchlings will be disturbed.**

SCCPRD suggests that inactive nests not be removed as stated in BMP B1-8. While we agree that vegetation clearing, including trimming of shrubs or trees, take place outside the migratory bird or raptor nesting season, addition of the following mitigation measures is recommended:

- If vegetation removal must occur during the migratory bird nesting season, a survey for nesting migratory birds should occur prior to the start of clearing or construction activities. If any active nest(s) are detected, all vegetation clearing activities should be suspended and a buffer

## Comment Set SCCPRD, cont.
## Santa Clara County Park and Recreation Department

established. All vegetation clearing activities within 50-feet of the active nest(s) will take place after the nest(s) are no longer active and chicks have fledged. Please note CDFG generally accepts a 50-foot radius buffer around passerine and non-passerine land bird nests; however there is some flexibility to reduce or expand the buffer depending on the specific circumstances.

- *Nesting Raptors*: All vegetation clearing, and/or project implementation and construction activities, should take place outside the raptor-nesting season (February 1- July 31). If such activities must occur during the raptor-nesting season, all suitable raptor-nesting habitat within 500 feet of the impacted area should be surveyed for active raptor nests. If an active raptor nest is located within 500 feet of the construction area, a no-activity buffer should be erected around the nest while it is active to protect the nesting raptors. Every attempt should be made to protect trees and nests that contain active raptor nests. Please note CDFG generally accepts up to a 250-foot buffer radius for raptors; however, in consultation with CDFG, there may be flexibility to reduce or expand the buffer depending on the specific circumstances such as for nests not within the line of sight of construction activity.

**SCCPRD-9 cont.**

**Bio-2 Flag and avoid woodrat houses.**
The Draft IS/MND notes the presence of the stick houses of San Francisco Dusky Footed Woodrat in the project area. While, SCCPRD concurs with the mitigation measure to flag and avoid houses, we recommend incorporation of the following additional mitigations measures:

- Safety and/or silt fencing erected around all houses within 25 feet of construction activities.
- If stick houses are unavoidable, for example if construction activities must occur directly through or within 5 feet of a house, CDFG should be consulted. If the house appears active, approval should be sought from CDFG to 1) trap the occupant(s) of the house, 2) dismantle the house, 3) construct a new artificial house with the materials from the dismantled house, and 4) release the occupant into the new artificial house.

**SCCPRD-10**

**Bio-4b Remove and salvage Loma Prieta hoita.**
Due to the potential significant impacts to riparian and mixed oak woodlands in the project area, the Draft IS/MND should stipulate specific mitigation measures to be undertaken to reduce potential impacts to less than significant. SCCPRD recommends that a tree preservation plan also be prepared. Mitigation measures should include tree assessment conducted by a certified arborist experienced in assessing construction impacts to trees. SCCPRD requests that a copy of the arborist assessment and tree preservation plan be submitted prior to project implementation. Removal of trees rooted within the calcine may also be subject to tree protection and removal policy contained in the Santa Clara County Tree Preservation Ordinance.

Regarding impacts to trees in Site B Temporary Access, please refer to SCCPRD comments previously stated under 2.3 Project Scope of Work -Construction Elements.

The Draft IS/MND states that "a planting plan would be prepared as part of the Mitigation Monitoring Plan for the Streambed Alteration Agreement". SCCPRD requests that a copy of the planting plan be submitted for review and comment prior to implementation of project or construction activities.

**SCCPRD-11**

**4.5 Cultural Resources – Native American Consultation**
The Draft IS/MND states that the project could discover previously unknown historic or pre-historic resources, and/or Native American human remains. Even though a "search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area," SCCPRD recommends that Native American representative(s), listed in the Native American Heritage Commission's May 5, 2006 response, be informed of the project.

**SCCPRD-12**

## Comment Set SCCPRD, cont.
## Santa Clara County Park and Recreation Department

**4.9 Land Use and Planning**

SCCPRD-13

As part of a regional planning effort, the City of San Jose, County of Santa Clara, City of Morgan Hill, City of Gilroy, SCVWD and Santa Clara Valley Transportation Authority are signatories on the Santa Clara County Habitat Conservation Plan (HCP) / Natural Community Conservation Plan (NCCP) project. The HCP/NCCP is currently under preparation thus the proposed project objectives and mitigation measures should be consistent with the conservation objectives and mitigation measures of the HCP/NCCP.

The Draft IS/MND states that the project is within the area covered by a habitat conservation plan, referring to it as a Multiple Species Habitat Conservation Plan (MSHCP). However, The IS/MND should correct the reference to the "Santa Clara County Habitat Conservation Plan (HCP) / Natural Community Conservation Plan (NCCP) (HCP/NCCP)".

SCCPRD-14

In conclusion, the SCCPRD appreciates the collaborative and cooperative approach undertaken to implement the Jacques Gulch Restoration project. We look forward to receiving subsequent documents including the planting plan, and participating in future discussions as the project proceeds.
If you have any questions regarding these comments, please call me at (408) 355-2235 or via e-mail me at Antoinette.Romeo@prk.sccgov.org.

Sincerely,

Antoinette Romeo

Antoinette Romeo
Park Planner

cc: Jane Mark, Senior Planner, Santa Clara County Parks and Recreation
Mark Frederick, Construction Services Manager, Santa Clara County Parks and Recreation
Mohamed Assaf, Senior Engineer, Santa Clara County Parks and Recreation
Julie Mark, Deputy Director, Santa Clara County Parks and Recreation
Lisa Killough, Director, Santa Clara County Parks and Recreation
Ken Schreiber, Program Manager, Santa Clara Valley HCP/NCCP

# APPENDIX C

# NOTICE OF INTENT TO ADOPT MITIGATED NEGATIVE DECLARATION

# NOTICE OF INTENT TO ADOPT
# MITIGATED NEGATIVE DECLARATION

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 *et seq.*), the CEQA Guidelines (Title 14 Code of Regulations Section 15000 *et seq.*), and Santa Clara Valley Water District (District) procedures for implementation of CEQA (Environmental Planning Guidance WQ52001 and WW52001), an Initial Study was prepared for the Jacques Gulch Restoration Project that identifies and evaluates the environmental impacts of the proposed project. Based on the Initial Study, it has been determined that a Mitigated Negative Declaration is appropriate for the project. This is a Notice of Intent to adopt a Mitigated Negative Declaration for this project under the provisions of CEQA, 14 CCR Section 15072.

**Project Title:** Jacques Gulch Restoration Project

**Project Description:** The Jacques Gulch Restoration Project would remove mercury-laden sediments (calcine) from an approximately 650-foot section of Jacques Gulch and an approximately 1,400-foot section of an unnamed tributary to Jacques Gulch near the intersection of Alamitos Road and Hicks Road in unincorporated Santa Clara County. The project would also replace the undersized culvert passing beneath Alamitos Road that conveys water from Jacques Gulch to Almaden Reservoir. Mercury-laden sediments removed will be consolidated at the Mine Hill consolidation site within Almaden Quicksilver County Park.

The proposed project would not be located on a site that is included on any of the lists enumerated under Section 65962.5 of the Government Code.

**Project Location:** The project site is located on the following Assessor's Parcel Numbers: 742-01-002, 583-23-012, 583-55-001, 583-55-006, 583-55-004, 583-23-019, 583-24-009, 583-24-007, 583-24-004, 583-26-001. The project is located north of Hicks Road and west of Alamitos Road in Santa Clara County, California. The project is located in an area known as Jacques Gulch, at the foot of Mine Hill, within Almaden Quicksilver County Park. The project consists of two separate sites. Site A is immediately west of Alamitos Road, at Hicks Road. Site B is found farther west off Hicks Road, on a tributary to Jacques Gulch. Water flow from the project passes in a culvert beneath Alamitos Road to Almaden Reservoir.

**Public Review Period:** An Initial Study/Mitigated Negative Declaration has been prepared for the project. Public agencies and interested members of the public may review and comment on the Initial Study/Mitigated Negative Declaration between May 1, 2008 and June 2, 2008. Written comments should be submitted to the address below no later than 5:00 p.m. on the last day of the review period.

Copies of the Initial Study/ Mitigated Negative Declaration are attached for public agencies and persons previously requesting a copy. Copies of the Initial Study/Mitigated Negative Declaration are available for review at the District headquarters office:

- Santa Clara Valley Water District
  Headquarters Building
  5700 Almaden Expressway
  San Jose, CA 95118

As well as the:

- Almaden Branch Library
  6445 Camden Avenue
  San Jose, CA 95120

Copies may also be obtained by contacting the Santa Clara Valley Water District. Electronic copies of the Initial Study/Mitigated Negative Declaration are also posted on the District's web site www.valleywater.org.

The Santa Clara Valley Water District Board of Directors (Board) is tentatively scheduled to consider adoption of the Mitigated Negative Declaration at its meeting on August 12, 2008. The meeting date is subject to change. The proposed Mitigated Negative Declaration along with any comments will be considered by the Board in conjunction with consideration of the project for approval. The Mitigated Negative Declaration will become Final if adopted by the Board.

**For more information:** For more information, contact Ryan Heacock at (408) 265-2607, extension 3202.

Written comments should be submitted no later than 5:00 p.m., June 2, 2008, to the following address:

Ryan Heacock, Environmental Planner
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Olga Martin Steele
Chief Executive Officer

4/23/08
Date